

Edited by
Tania Singer
Matthias Bolz

An abstract graphic consisting of several overlapping circles. The top circle is a solid brown color. Below it, there are circles in shades of blue and green, some of which are semi-transparent, creating a layered effect. The circles are arranged in a way that suggests a globe or a series of nested spheres.

Compassion

Bridging Practice and Science

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Nathalie Singer for producing all of the artistic audio collages and most of the audio files in the chapters.

Finally, to each of the authors who generously gave of their time, experience and wisdom in contributing chapters and for allowing open access to their training programs in order to benefit the greater good.



Sound Collage

0:28 min

Thank you

Nathalie
Singer

Advanced Organizer

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Sound Collage

1:54 min

Myths about Compassion

Nathalie
Singer

About this Book

Tania Singer

Dear readers, listeners, and viewers,

As you probably noticed already just by scrolling through this book, it is unlike most other books you have come across. We offer you a multi-media, open-source book produced and sponsored by the Max Planck Society to report on recent advances in compassion research and the application of compassion training in the world. Our hope is that, in doing so, we will offer society as a whole a useful tool to explore and learn about the theme of compassion. All of the scientists, contemplative practitioners, clinicians, and artists who have contributed either through written chapters, sound collages, art photography, or video work have freely given of their time and work in order to support the production and distribution of this multi-media book.

You may be wondering how this book came about.

It originated out of a workshop titled, “How to Train Compassion” which I organized as director of the Department of Social Neuroscience at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig, Germany, in 2011. I have been working for many years on the psychological and neuroscientific foundations of empathy and compassion. In 2008, I was awarded a European Research Grant to support the investigation of the plasticity of the social brain, that is, the study of whether we can train socio-affective skills such as empathy and compassion and whether such mental training can alter our psychological and physical well-being, our social behavior, and our brain and body responses. In this context, my team and I began to develop secular mental training programs for the improvement of socio-affective skills such as empathy and compassion. Around the same time, many other research groups, mostly based in the United States, had also begun to design such programs for the cultivation of compassion. In 2011, I felt that the time was ripe for bringing people together who were working in the emerging field of compassion sciences. Together, we could exchange mutual experiences and ideas, discuss the struggles and difficulties of this new research field, and begin to envision the future of work with and in compassion training.

While organizing this workshop and exploring possible venues for it, I met the artist Olafur Eliasson at a conference and we engaged in a dialogue about the respective links between his artwork and our scientific interests in the field of social and affective neurosciences. As you can read in more detail in our dialogue, Olafur was very interested in the phenomena of joint feelings, interdependence, and compassion. During one of our many conversations, he kindly offered to host this workshop in his studio in Berlin, Germany. Through this fortunate coincidence and Olafur’s generosity, the workshop thus took place in a wonderful art studio, the Studio Olafur Eliasson in Berlin from July 20 – 24, 2011.

For everyone who was present at this workshop, these four days were unforgettable. The special atmosphere of the art studio, including Olafur’s remarkable art pieces, imbued the workshop participants with a sense of creativity. This, together with the interdisciplinary nature of the workshop attendees, fostered a creative, intimate space for an intense dialogue and lively exchange of ideas. As the goal of this workshop was to explore different ways to train compassion

in secular settings and included making these trainings amenable for scientific investigations, a mix of people from a wide range of disciplines came together. For a list of program participants, please see [program](#).



How to train compassion? – was the title and the main question addressed in a workshop organized by the Department of Social Neuroscience at the Max Planck Institute in Leipzig, directed by Prof. Dr. Tania Singer, taking place in Berlin from the 21st to the 24th of July 2011

As the emphasis of the present workshop was on the practical aspects of compassion training rather than on the science behind it, we also included practical meditation sessions at the beginning and the end of each workshop day that were guided by our invited long-term meditation practitioners. In Olafurs' wonderful studio space, light spheres hung around our heads creating a unique surrounding that supported and strengthened our experiences during these mental training sessions.

We hope that the special atmosphere of this workshop will be transmitted to the reader via the many sound collages, videos and pictures included throughout the book. The sound recordings are based on Dirk Schwibbert's recordings and are artistically collaged by [Nathalie Singer](#). The video materials were shot and cut by Thomas Lopatka during the workshop.

At the end of these inspirational four days, all of the participants felt that they wanted to somehow offer the broader public some of the knowledge, wisdom, and insight that was exchanged and developed in that time. The sound collage, "[Origin of the Book](#)", shares snippets of the end of the workshop session in which we brainstormed how we could offer our insights to a broader audience. We finally converged on the idea of a multi-media book as the format that seemed to best represent the multi-disciplinary nature of the conference. We hope that we have captured the creative spirit of the art studio and the intellectual energy of the convergence of scientists from the fields of basic psychology, neuroscience, and the clinical sciences with contemplative scholars and practitioners.

children intention sense positive
develop meditation state
individuals cognitive change
exercise awareness
Buddhist life emotional
balance care comp
learn insight levels
conditions help breath clinicians social in
time training gp
kindness att
nature

participants process
intervention response
study activity
self way
loving
group
passion
interdependence support affective
practice pain
behavior patient
attention mind

Reflecting the richness of the workshop and the emerging field of compassion sciences was a challenging endeavor; the book ended up being quite large. It now contains more than 880 pages and even includes summaries of concrete compassion training protocols, some of which are published for the first time in this book.

How is this book structured?

The book has four main sections indicated by four different colors: experiences with compassion (yellow), concepts of compassion (blue), science of compassion (orange), and compassion training programs (green). The advanced organizer visualizes the overall structure of the book including the many sound and video files. Further, the summary tables of part 1, 2, 3 and 4 include chapter titles, authors, and links to short biographies of each author. In addition to the written chapters, you will encounter sound collages throughout the book that were created by Nathalie Singer. The sound materials that comprise the collage were recorded during the workshop and refer to the workshop's main themes. In addition, you will be able to enjoy Olafur Eliasson's artistic photographs. Finally, the book also contains a video chapter and a page about a compassion movie produced in the context of the workshop.

The four parts of the book aim to cover different aspects of compassion. The first section is intended to be experiential and personal in nature and offers some first-hand experiences of what it means to apply compassion training programs in schools with children or teachers, in clinical settings with patients, or in end-of-life settings where care is provided for people who are severely ill or dying. The second section is more conceptual in nature and gives an overview of different models and approaches to the concept of compassion including evolutionary, psychological, neuroscientific, and Buddhist perspectives on compassion. The third section summarizes scientific empirical evidence that has recently started to emerge in the field of psychology and cognitive neurosciences on the biological, hormonal, neuronal, subjective, and behavioral foundations of compassion and compassion training. This scientific part covers topics related to compassion and stress, burn-out, pain, the autonomic nervous system, difficult emotions, self-compassion and subjective well-being. For the more scientifically minded reader, references to peer-reviewed scientific journals can be found at the end of each chapter. In the last section of the book, the reader will find information about many secular compassion training programs that have been developed in the context of scientific research at leading universities and institutions such as Emory University, Stanford University, University of Texas at Austin, the Max Planck Institute for Human Cognitive and Brain Sciences, the University of California at San Francisco, and many others. As most of these programs have not yet been published elsewhere, I would like to take the opportunity to thank the authors for their trust and generosity in making this precious material available to the general public through this book. The development of secular training programs often takes many years of in-depth and collaborative work. We would, therefore, ask that if you intend to apply any of these training programs in the context of your own work that you acknowledge and contact the respective authors.

The final sections offer references to other relevant books and access to a ca. 30-minute long documentary titled, "Raising Compassion". The documentary features a small group of meeting participants conversing on relevant topics. Tomas Gislason and his team together with Olafur Eliasson and his team produced and filmed the project.

We hope that this multi-media book will inspire and motivate you to integrate some of these ideas and practices into your everyday life; without doing so, compassion is nothing but a cold concept. With this book, we aspire to bring more attention to compassion in our society. We hope that this work will continue to grow, becoming more elaborate and refined over time, so that it can support

the development of a more caring and sustainable society which recognizes the importance of secular ethics and the interdependence of all beings.



Sound Collage

3:46 min

Origin of the Book

Nathalie
Singer

INTRODUCTION

Olafur Eliasson and Tania Singer in Conversation

Moderated by Matthias Bolz



Matthias Bolz: You come from different fields of work. Tania, you are a neuroscientist interested in social emotions such as empathy, *schadenfreude*, and compassion; Olafur, you are a visual artist. Now, Olafur, you hosted the workshop “How to Train Compassion” organized by Tania, at your studio in July 2011. When and how did you meet and how did this cooperation come about?

Tania Singer: We first met at the Falling Wall's Conference in November 2010 where we were both speakers. The evening before the conference you hosted a reception in your studio, where we spoke about empathy and emotional resonance. You told me of your great interest in the concepts of “felt feelings” and emotional resonance. I think our next encounter was when you called me in January of the following year to talk about my research on compassion, emotional contagion, and empathy. If I remember correctly, at that time, you were thinking of working on a bigger project related to collective felt feelings.

Olafur Eliasson: That's right. Sharing a feeling or an experience is something I have addressed a number of times. How does standing next to another person while looking at a painting change your perception of that painting? Which impulses from the others make it into your perceptual field? In my eyes, this is an area in which art history has failed; it has failed to recognize the importance of experiencing things *with* others. This is a field where the issue of connectivity comes in – of how the awareness of being connected influences your sense of subjectivity. We are on a

fundamental level interdependent and, in fact, coproduce each other. And I found you very inspiring, since you have a set of tools for talking about these topics that are, for the most part, missing in the art sphere and can be useful in dealing with questions that otherwise tend to be treated very dogmatically. Essentially, I am very interested in the entanglement of art and society and how they affect each other. I am curious about mechanisms of interdependence – in what ways are you influenced by art? And how do you, in turn, influence the artwork with which you are engaged?



MB: What motivated you to host the workshop together? What were your expectations?

TS: We were talking to each other a lot at this time, just as I was in the midst of organizing an international workshop in Berlin, titled, “How to Train Compassion.” I told you about it and suggested we could organize an additional art-science evening in your studio on the topic of compassion, as all these international experts would be in town anyway. And if I remember correctly, you then spontaneously said, “Why not hold the whole thing in my studio?” That is, you proposed hosting the entire workshop in your space.

This was intriguing because my motivation to create bridges between art and science has existed for a long time and I have always been passionate about the arts. As a young person, I was very involved in theater and film. I always felt that science and art are not as different as people think – both are very creative fields, both are interested in experiments, and both want to find out about the nature of reality and the fundamental nature of people and of society. It is just the way that both fields approach these questions that is very different.

But on the other hand, I also have to admit that when you proposed holding the whole workshop in your studio, instead of just an art-science evening, as I had had in mind, I was a bit nervous. Having both mental practice and scientific talks in the middle of your art studio where everyone was still working and eating together... To be honest, we didn’t know whether this would be the right setting for such an in-depth workshop. But then after having reflected upon it, I woke up the next morning and said, “If we really want to take the integration of art and science seriously, this is the only way to do it – to just jump in at the deep end and see what emerges out of this joint experience.” And so we decided to accept your generous offer and, at the end of these four days, we were all extremely thankful for your having hosted us. It was a very special experience for all of us.



OE: When we talked about your plans of doing the seminar, I had no doubts that the studio was potentially one of the best possible platforms for this event, logistic questions set aside. And I hoped that by sharing this space, by showing hospitality, we might be able to amplify the felt feeling of being present, of being together and producing shared knowledge, and in a way that could go beyond what one could plan in advance. I certainly also hoped that I would benefit from being a part of this, not just by learning about compassion processes, but also in the wider sense of being included in a network where particular types of thinking take place. I believe that, as an artist, I have a responsibility to actively host people and events – to proactively engage with people who might not otherwise come to my studio. This is a kind of positive responsibility. If I want to have a studio that is to play a role in the wider context of society, of the world, I cannot just sit and wait for society to come and invite me – I have to go and invite the world into my studio.

TS: And we came.

OE: Yes! Thank you for your trust and for taking the risk, as there was clearly no way you could have known how this would turn out. I thought it was quite a courageous move to be open to this kind of collaboration. Most of the time, other spheres of experience marginalize artists as some sort of clown or jester. This is another reason that I am incredibly thankful and happy about our joint adventure.



MB: The crowd of people that came together for this workshop was very heterogeneous. Do you see a connection between artists, scientists, and contemplative practitioners?

TS: Indeed, the people who were invited to this workshop came from very different backgrounds. Some were neuroscientists, some clinical psychologists, some contemplative scholars or Buddhist monks and some communication coaches. Usually contemplative practitioners do not talk to neuroscientists, who seldom talk to clinical practitioners. And, of course, there is a new trend in the field of contemplative studies that tries to bridge contemplative first-person practices with third-person scientific approaches. However, this field is still in its infancy. What is important for creating such bridges between disciplines is that people meet around a topic through which their mutual passion creates resonance. When this happens, it is not so important anymore from which discipline each of us comes. The important question here is then rather, “What can we do with this work to advance and be of service for society as a whole?” and, in that, we share a sense of joint responsibility and common humanity.

TS: I have a question for you, Olafur: You talked about the hope that hosting such meetings in your studio might be a starting point to bring about change and sustained movement in your studio. Do you have the feeling that this four-day workshop – four intense days – created a ripple effect? In other words, was it something that changed the way of thinking in the studio?

OE: Yes. I often invite people to join us from various fields of research – scientists, architects, dancers, and other practitioners – to learn, be inspired, exchange thoughts. So this in itself wasn't

new, and I did hope for lasting traces of your presence here. As it turned out, this is exactly what happened: the compassion practitioners and scientists have most certainly influenced our practice. You influenced some parts of the studio more than others, of course. On the one hand, the seminar was a unique experience, but on the other hand, it was also very much in synch with what was going on already.



What you brought to my studio was both a great knowledge resource from a very wise group of thinkers and doers, and a strong feeling of physical presence. This was an important aspect, given that these two are much too often separated. And the nature of the topic obviously succeeded in actively integrating thinking and doing. I believe this aspect has overall influenced the work processes in the studio. It has inspired further confidence that one cannot do anything without it always being part of a thought process. At the same time, contemplative practices are not so alien to many artists, and the idea of experimenting with these approaches is not at all unusual. So it didn't feel alien or surprising. Having the seminar at the studio wasn't so very different from what we normally do. I think it was – at that particular moment in time and in that context – well placed, and people understood intuitively that it was a moment of particular quality.

MB: So what about the scientists? How did they respond? Did you think that they also changed in some way?

TS: I received feedback from nearly all of the participants, who said that they experienced the workshop to be completely different from typical workshops because it was in Olafur's space. A lot of them said that having these objects, spheres, these visual works of art hanging everywhere helped ideas, arguments, and creativity to flow. It was different from how it would have been in one of those typical air-conditioned hotel seminar rooms, where you are primed in a more intellectual, linear mind-space – here you were rather primed into a very inspiring, creative space that also included physical and emotional elements. People told me that just being in the space triggered a completely different process in them. Obviously, the constellation of people coming together here was also quite special. People are still talking to me about these days in a most enthusiastic way.



MB: Given these great experiences, are you planning a second edition of the workshop?

OE: It would be my pleasure! Tania knows that my studio will always welcome a new group of compassionates, and we are actually working on defining topics for such a future gathering.

TS: Yes, we already talked about the potential of perhaps doing another workshop together. And we talked about what might have been missing the first time. As a next step, we thought of focusing more on the question of how all this knowledge and experience can now reach society. How can we transform this into actions? How can this work influence economic and political systems?

MB: Speaking about the effect of these topics on the outside world, do you think the events in Oslo that happened during the workshop influenced the way we understood compassion and felt as a group during these days?

TS: For sure those tragic events brought a real life aspect into the workshop. We were talking about compassion and then all these people were shot and murdered in Oslo and on Utøya. And I remember that the day after the attack, Joan Halifax was leading the morning meditation focusing on compassion and dying. She asked us to include not only the victims of the attack but also the perpetrator in our meditation. This was very powerful. She also talked about the role of compassion in the dying process and many of us were deeply moved while sitting. And I know that one post-doc from my group, whose family is from Oslo, was really having a very hard time and could not understand how cultivating compassion could also mean including a perpetrator, a killer of lots of his people. How can you ever open your heart to such a person? These moments also produced friction. You could feel that. It is one thing to talk about universal compassion; it is another thing to live it in a very real situation – at a moment when your people have been killed.



OE: Yes – this was a tough moment. Joan also reminded us, not just about Oslo, but about the drought and hunger crisis in the Sudan – let's not forget that – and asked us to be able to encompass all these people. That was really beautiful, being reminded of having to go beyond this circle of intimate European, Scandinavian, neighborly feelings. It goes for everyone. Another thing that this meditation – and all the meditations really – highlighted is an important theme for us in the studio: the feeling of being present. We talk about this a lot with the studio team, about the consequences of our feeling present, and recently we worked a lot with notions of public space. What resources do these spaces offer us? What are the values that are used as guidelines to define public spaces? Who are the people who take on the responsibility of defining space on behalf of others? Do these decision-makers support qualities in public spaces in such a way that they actually support the notion of intersubjectivity, of people being together? Surprisingly, we see a number of public spaces being developed that do not support the idea of sharing space.

TS: Olafur, do you think that this book and the documentary that we are producing together based on this first workshop could be something that might create ripples and positive changes?

OE: I do see the documentary and this book as addressing compassion in a different way by introducing, in a way, an almost pragmatic approach. It's clear to me that both art and

contemplative sciences, in particular, often face a great deal of skepticism. Even within a science context, the type of research that this book represents is often marginalized by the natural sciences. And although we are seeing change, we should be very honest and admit that it is a relatively slow change. There is a need for more and growing openness and, in order to avoid marginalization, you have to make your material accessible. You have to, in effect, demystify it to make it accessible and relevant for non-specialists ... using the words of science to describe something that – for many people – is considered non-scientific is a very good approach.

It's necessary to understand the greater cause-and-effect relations, our impact on the world and its impact on us. This is exactly the moment where you begin to ask: How do I feel in a group? What is collectivity? What is my notion of community and how do I experience being part of it? When does one begin to feel responsibility for somebody else? Somebody next to you, somebody in another room, in another country, in Norway *and* the Sudan? This is really interesting, and there isn't much clarity on the topic, although we are presented with people who are suffering all the time. We know this is happening. There is nobody suffering anywhere without somebody else knowing about it – in our information age, this barely happens anymore.

TS: Yes, these notions are very much reflected in the concept of interdependence, and the realization of the interdependence of human beings is a crucial prerequisite for compassion to unfold. The idea that we are single, separated units is just an illusion. Social neuroscience has provided quite a lot of evidence showing how interdependent we really are. Sometimes this also happens in unconscious ways; for example, sometimes we experience emotional contagion without realizing it, but our actions are influenced.

OE: So from a greater perspective, this book should be like a dance – it is exciting, it's physical, it's great to look at, and you don't know what the next move is. To send somebody off into the world dancing like this is almost like making a work of art – you are somehow made to feel welcome but it's also an unpredictable journey. Once we succeed in acknowledging that the main goals lie within ourselves, we are, to some extent, free from having dictated to us in which direction to go.

TS: Yes, that's true.

OE: And this is where the book starts to feel like a dance.

TS: So let's dance!





Sound Collage

1:10 min

Questions

Nathalie
Singer

PART 1

Experiences with Training Compassion



PART 1

Experiences with Training Compassion

0

What Do We (Not) Mean by Training?

Boris Bornemann / Tania Singer

1

Teaching our Children – Kindness and Compassion in Elementary Schools and Foster Care

Brooke Dodson-Lavelle / Geshe Lobsang Tenzin Negi

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Erika L. Rosenberg / Margaret Cullen

6

Being with Dying - Experiences in End-of-Life-Care

Joan Halifax

Preface II

What Do We (Not) Mean by Training?

Boris
Bornemann



Tania
Singer



What Do We (Not) Mean by Training

Boris Bornemann and Tania Singer

“Master, master, how long do I need to enlightenment?”

“Well, maybe 20 years.”

“And if I try really hard?”

“Then 40.”

- Buddhist joke

In this section and [section 4](#) (“Training Programs of Compassion”), we often use the word “training” when referring to practices that enhance our capacity for compassion. Let us make a brief comment on the use of this word in the context of compassion and contemplative practices.

In the scientific literature of psychology and neuroscience, contemplative practices are usually referred to as “mental training”[1]. This term was coined to denominate various forms of mental activity such as memory training[2] and motor skills training by using imagination[3]. Research into mental training was an established scientific field that served as an alley for meditation research to enter the conceptual world of psychology and neuroscience. Translations of classical Buddhist texts have also sometimes referred to contemplative practice as “mind training” (e.g., the lojong or Seven Point Mind Training)[4].

In general, training refers to the systematic acquisition of knowledge, skills, or competences and can extend over short durations such as hours, days or months to years or to a whole lifetime. In this sense, the use of the word training in the context of cultivating compassion is certainly appropriate. However, some connotations of the word “training” may produce misconceptions leading to an understandable resistance to the use of the word and even to the practices themselves. Let us briefly address and clarify these connotations.

Although commitment and a firm motivation are necessary to engage in contemplative practice on a regular basis, these mental practices are not to be approached with a tense mind. Even for basic mind focusing and balancing type of meditations (shamata), emphasis is placed on relaxation as the ground on which stability and vividness of the mind can develop[5]. Relaxation is even more important for more affectively focused practices such as loving-kindness meditation[6]. We cannot force ourselves to be more compassionate; the very application of force is opposed to the disposition that we want to bring about. An attitude of wanting to achieve can thus be counterproductive. This is mirrored in the lojong proverb “Give up hoping for results”[4]. Also, as Barry Kerzin discusses in [chapter 4](#), instead of directly aiming to become more compassionate, it may sometimes be wiser to develop virtues such as patience, generosity, and forgiveness, which support and give rise to compassion.

The view that too much wanting can be counterproductive to compassion is also supported by neuroscience. As discussed in [chapter 10](#) and [chapter 15](#), compassion is rooted in the motivational system of “care” and not “achievement.” Although both systems can work in cooperation, many of their mechanisms and produced states are in opposition (e.g., contentment and quiescence versus activation and goal-directed drives)[7]. It may thus be paradoxically true that in order to become

more compassionate, we have to let go of our eagerness to become so. This is, however, a delicate issue because motivation and a clear sense of direction are, of course, required to engage in regular practice.

Finally, as Margaret Cullen writes in [chapter 2](#), compassion training is not only about teaching something new. It is rather “a way of uncovering, revealing and reconnecting with what is already there.” Much of the work of cultivating compassion requires working with obstacles such as fear (see [chapter 3](#)) or difficult emotions (see [chapter 5](#)) before we can tap into our innate dispositions of love, care, and benevolence (the “care system,” see [chapter 10](#) and [chapter 15](#)).

To summarize, training compassion requires motivation and clear intentions but should not be based on competitive or purely achievement-oriented motivations. It should rather be understood as reconnecting to innate resources and nurturing them, guided by the acquisition of knowledge that helps to deepen our understanding of ourselves, others, and the nature of reality. The Pali and Tibetan words for meditation, *bhāvanā* (cultivation) and *gom* (to become familiar with something), actually capture these notions better which is why many authors of this book use such formulations in the following chapters. Given these explanations, we hope that the term “training”, which is sometimes more practical to use, will be understood in a similar light.

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Sound Collage

1:13 min

What We Would Like to Do

Nathalie
Singer

Chapter 1

Teaching our Children

Kindness and Compassion in Elementary Schools and Foster Care

Children as young as 5 years old can be trained in compassion

“Where did this sweater come from?”: Teaching the concept of interdependence

Compassion training may also help adolescents with childhood trauma

Brooke
Dodson-Lavelle



Geshe Lobsang
Tenzin Negi



Teaching our Children

“I can’t believe I did this,” the teenage girl said. “The other day on my way to school I noticed that the man walking in front of me dropped some money from his pocket. I ran and snatched it up off of the ground. It was \$20! I was so excited! That’s a lot of money to me. I could buy this pair of shoes I wanted – this really, really cute pair of shoes – with that money.”

She looked at me and began playfully shaking her head. “But then I started thinking. What if he needs this money? What if he just lost his job, or has kids to support? How would he feel if he lost this money? I just couldn’t keep it. I caught up with him and gave it back.”

I was talking with a 16-year-old girl enrolled in our Cognitively- Based Compassion Training (CBCT; see [Box III](#)) program for adolescents in Atlanta’s foster care system. CBCT is a secularized form of compassion meditation derived from the Tibetan Buddhist *lojong* or “mind training” tradition. The protocol involves the systematic cultivation of compassion through the development of mindfulness, emotion regulation, self-compassion, equanimity, perspective taking and empathy.

This particular girl had returned to take CBCT for a second time and was giving the class an update on what she had learned during the first round of the program.

“So, how did it feel to give back the money?” I asked, smiling.

“Sounds like you really wanted those shoes!”

We both laughed. “You know I did!” she said. “But I couldn’t help but think about that man. I couldn’t stop thinking about his situation, what his life might be like, or how he might feel to lose that money...”

I nodded.

“I never would have cared before,” she said. “This compassion meditation is *doing* something to me!”

Cognitively-Based Compassion Training (CBCT)

The CBCT program was originally developed in 2005 as a means to prevent and reduce rates of depression and stress among undergraduate students at Emory University (for more detail about the program see [Box III](#)). The promising results of this project^[1] encouraged us to explore means of adapting and delivering CBCT to a variety of other populations (see [chapter 13](#)). For example, in addition to employing CBCT as a means of reducing stress and enhancing immune function, we have begun to conceive of ways in which CBCT could promote prosociality and mental flourishing, and ameliorate or protect against the effects of trauma. Below we briefly outline two of our current projects – CBCT for adolescents in foster care and for children in elementary school – and share some of the ways in which we have adapted and taught this program for these groups.

Though the needs of adolescents in foster care and elementary school children differ in significant ways, the CBCT program that we adapted for each population operates on the same basic

presumption: self-centered thoughts and behaviors are harmful to oneself and others, whereas other-centered, altruistic thoughts and behaviors are beneficial to oneself and others. This founding assumption guides the structure and the development of our CBCT programs.



CBCT teachers Brooke and Brendan leading third graders in compassion practice

Designing a training program for a specific audience – one that is developmentally and culturally appropriate as well as experientially accessible – is crucial to the success of contemplative programs. Yet although the program is adapted for different age groups and needs, the five key components of CBCT remain constant. These are:

1. Developing Attentional Stability
2. Cultivating Self-Compassion
3. Developing Impartiality
4. Developing Endearment and Empathy
5. Strengthening Compassion

The theory of CBCT is described in more detail in another chapter ([see Box III](#)). Below we provide some specific examples of our work teaching these components of compassion to children and adolescents.

CBCT for Adolescents in Foster Care

We began our work in the Georgia foster care system at the invitation of B. J. Walker, the former Commissioner of the Department of Health and Human Services, who recognized a tremendous need for prosocial programs to support adolescents in foster care. Foster care youth generally suffer from exposure to a host of traumas, including abuse or neglect, which have been shown to produce lifelong maladaptive physiological and psychological changes[2]. Children placed in foster

care, for example, report lifetime prevalence rates of post-traumatic stress disorder similar to those of US war veterans, and are four to five times more likely than peers in the general population to be hospitalized for suicide attempts[3].

Though the circumstances may appear grim, there is much that can be done to support youth in foster care. Our team at Emory adapted our adult CBCT program to help youth in care connect more deeply with others and to learn to receive the love, guidance and support they need from caregivers.

Children in foster care tend to be guarded and cautious of forming new relationships, likely in order to avoid the threat of future pain, rejection or trauma. This approach, however, can exacerbate feelings of loneliness and social isolation. CBCT training helps children build the strength as well as the willingness to face fears of rejection and trauma. It also helps participants reconnect with their natural tendency to want to feel loved and connected. CBCT further offers adolescents strategies for regulating emotions, reducing stress and reframing life experience in more constructive ways. It encourages participants to face their habitual ways of being in and relating to the world that further contribute to suffering, and helps them aspire to overcome them. The program also aims to build self-confidence and self-worth, and promotes optimism, gratitude and connectedness.

In 2008, we piloted a CBCT program for adolescent girls, ages 13 to 18, living in a group foster care home. The success of this pilot program, described in Ozawa-de Silva and Dodson-Lavelle[4] (see Box III), has led to ongoing studies investigating the effects of compassion training in this population[5],[6].

CBCT for Elementary School Children

In 2011, our team was invited to teach CBCT in our first public elementary school in Atlanta. We had previously developed 12-week CBCT curricula for children ages 5–7 and 8–10 in conjunction with the Paideia School in Atlanta, GA, to determine whether we could not only teach children to be more mindful, but also facilitate their emotional intelligence and prosocial development through training in empathy and compassion.

As we walked through the halls of the school on our way to our first class, we couldn't help but notice the school's new Kindness Campaign. Signs reading, "Be kind!" and "Be helpful!" lined the walls. The school was certainly on to something. Once in class, however, we asked the children about the signs, and asked them to tell us how to be kind and helpful.

"Just be nice", "don't be mean", "don't hurt someone's feelings", were the replies.

"But how?" we asked. "It is easy, most of the time, to be nice and helpful to your friends and family, and those that are like you. But how do you learn to be nice to others, including those you dislike, or even those that have bullied you?"

The children paused. Some of them shrugged.

"Do you think you feel compassion for someone who has bullied you?" we asked.

"No way!" "Probably not." "Maybe", they said.

We tried another approach. "What would the world look like if no one had any compassion?"





“The whole world would be at war!” one child yelled. Many of the children began nodding in agreement.

“So do you think it might be important to learn how to be compassionate?” we asked.

“Yes!” they yelled. And our work began.



A child's interpretation of their mind during practice: either too excited, too sleepy, or just right.

Teaching Compassion to Children and Adolescents

1. Developing Attention and Mindfulness

There are ample resources for helping children learn to develop mindfulness[7]. The cultivation of attention can be engaged and deepened through meditations that focus on the breath, sounds, sensations and even colors.

Developing attentional stability of mind is also essential for helping children recognize maladaptive thought and emotional patterns. Children are often well aware of the many things they crave (such as candy!), as well as those things they dislike and wish to avoid. Mindfulness training helps children learn to recognize these tendencies, and begin to learn to respond mindfully, rather than react mindlessly, to discomforts, temptations and even stressors in their lives.

In our work with adolescents in foster care, we quickly realized that these youth had tremendous difficulty settling in and feeling comfortable in their bodies. Thus we began incorporating yoga practice into our classes, and selected poses and sequences that would enhance balance and strength while promoting calm and stability. Though they initially had difficulty practicing sitting meditation for more than a few minutes without feeling agitated, yoga practice afforded them an alternate means of accessing stability, calm and relaxation, and helped them begin to “settle” into meditation practice during the program. Incorporation of somatic practices is a highly valuable addition to contemplative programs.

2. Cultivating Self-Compassion

The CBCT program rests on the view that all people share the same desire for happiness. Though it is at times easy to assume that our happiness depends on external circumstances, deeper reflection reveals that it is the way in which we relate to the world that contributes most directly to our happiness and suffering (see [chapter 16](#)).

The term “self-compassion” commonly denotes being kind and accepting towards oneself. Though this sense is included in our presentation, self-compassion involves three key steps: (1) recognizing the causes of one’s suffering; (2) understanding that one has the capacity to overcome this suffering; and (3) gaining confidence and making the commitment to transform one’s suffering.

By presenting this seemingly abstract concept in ways that were accessible for children, we found that the children we worked with had a remarkable ability to describe the suffering in their lives and the ways in which it affects their well-being. One afternoon, I read the poem, “Whatif”, by Shel Silverstein, which describes a bunch of worries -- like flunking tests, getting sick and not being liked -- that keep children up at night.



CBCT teachers Brendan and Brooke in the classroom

After I finished reading it, I looked up and asked if anyone in the class had ever experienced “Whatif mind”? Every hand in the room went up. Several students detailed the ways in which they obsessively worry or stress about tests, ballet performances, their parents’ relationships and so on. They described how this stress felt in their bodies in detail as well, and noted that they often tried ways of calming themselves down, either by distracting themselves or thinking positively. We used this as an occasion to talk about recognizing our stress triggers, and likened this insight of noticing early signs of stress to noticing “sparks” of anger or stress. By catching these triggers or “sparks” early on, we can manage them before they become full-blown forest fires. In another session, one young boy approached us after class and said, “I have a lot of forest fires in my life.”

Gaining deeper insight into the causes of one’s suffering takes time. For adolescent survivors of trauma, gaining confidence that suffering can be overcome can be difficult to comprehend. Though

foster youth could more easily recognize and appreciate the ways in which their own perceptions, judgments and patterns of reactivity contributed to or exacerbated their stress and suffering, some found it difficult to believe that they could find happiness, or that they deserved to be happy and loved. One girl said that her greatest fear in life was not finding someone to love her, as she felt worthless and damaged. Recognizing the source of these feelings is important, and we worked to empower these girls to believe that they are not only worthy of receiving love, but also that they often could already find sources of love and support in their lives. For some, it was helpful to introduce a mentor or benefactor practice, in which adolescents recall the kindness, love and support of a positive figure or role model in their lives. This priming of secure attachment can be a helpful step in this process.

3. Developing Impartiality

Most children find it natural and quite easy to feel compassion towards family members and friends. Many find it difficult to feel compassion for those who are not like them or who have harmed or wronged them in some way. In order to develop compassion for all beings, it is important to help children consider the ways in which all beings are alike in wanting happiness, as well as the ways in which our own biases inhibit our feelings for and connections with others.

As shown in the story above, children and adolescents can initially find it daunting or even confusing to imagine feeling compassion towards a difficult person or a bully. Helping children consider the ways in which they relate to others, as well as the many ways in which they are like others, is an important step in developing impartiality.

We like to play a game with children we call “I care/I don’t care”. In this game, we read out a scenario describing another child or teenager in a somewhat difficult situation, and ask students to stand along an “empathy scale” depending on how strongly they both relate to and care about the individual described in the situation. Individuals in each scenario are varied based on gender, race and social groups, as well as by categories of “friend”, “stranger” and “enemy”. Manipulating these categories helps to demonstrate how our capacity to empathize is in large part shaped by our in-group biases and judgments as well as by our own life experiences.

In one session with our elementary school children, we read out scenarios such as “someone was sick on Halloween and missed Trick-or-Treating”; “the new kid at school is sitting alone during lunch”; “a girl in your class couldn’t finish her math assignment”; “your best friend is getting teased because of what he or she is wearing”; “the class bully gave the wrong answer in class and looks embarrassed”, and asked the children to stand along the scale depending on how much they cared about each person described in the scenario.

Invariably, children were better able to empathize with, or care for, their close friends, or those who were in a situation that they themselves had experienced and could relate to. When we asked the students what they thought about the ways in which we relate to others, one eight-year-old girl shared this insightful response:

“[A] lot of the situations I could relate to but a lot I couldn’t. And for the ones I couldn’t, it would be wrong [not to care]...but if I really, really looked into myself, I could find something that related to me...so I cared the whole time because if you can really see it, you can relate to all situations, really.”

The ability to “walk in another’s shoes” and to learn to feel for or with another is crucial to developing impartiality, cognitive perspective taking and empathy.

4. *Developing Endearment, the Notion of Interdependence and Empathy*

“Take a look at this sweater. It’s comfortable, it keeps me warm...But where did this sweater come from? What else do I need to have this sweater? What does it *depend on*?”

This is one of the ways of introducing the concept of interdependence to children that we have come to enjoy.

“A store”, “money”, the children often reply.

“And the store? Do they make the sweaters? Where do the sweaters come from?”

Children very quickly catch on to the game. You need wool and sheep, you need shears, farms, farmers, trucks, roads (and people to make the trucks and roads), and all of these things need support, too, of course! The point of the mental exercise quickly becomes clear: Even a simple item like a sweater is part of an interdependent web that encompasses a vast network of relationships.

“And where does it end?” we ask. “Where does the web end?”

“It doesn’t end!” they often yell excitedly. “You need the whole world!”

Teaching interdependence is key for the cultivation of empathy and endearment. It enhances our sense of connection to and dependence on others. It can also serve as an opportunity for us to reflect on the many ways in which others, often unbeknownst to us, have benefited us in many ways. We can help children and adolescents reflect systematically by asking them to keep “gratitude journals” in which they write down things they are thankful for each day. This can help children learn to recognize and focus on the positive things in their lives more readily, rather than focusing solely on the negative.

Enhancing this sense of connection is crucial, and there are many ways to deepen this insight. We have found it tremendously useful to help students learn ways of tuning in to the suffering of others. Of course, by tuning in to their own suffering as outlined above, they are naturally learning to tune in to the suffering of others; we work to make this process more explicit. For younger children, we often play games that involve acting out and identifying others’ emotions to help build emotional awareness and intelligence. In one game we place cards with emotion words such as “scared”, “surprised”, “annoyed”, “sad”, “angry”, “hopeless”, “grateful” and so forth into a basket. We ask one child to choose an emotion word and act it out for the rest of the class. The other students are asked to name which emotion their classmate is feeling. Next we ask the students to share what clues helped them identify the emotion being acted out. Then we ask the actor to describe her strategy for expressing that emotion, taking care to elicit descriptions of how these emotions feel in the body, and how we can better learn to recognize when we are feeling a certain way. For adolescents, we have found that empathic reading circles can be extraordinarily helpful on many levels. Through these circles, in which we ask students to read a short chapter of a book together each week, adolescents learn to empathize with characters in these stories, to relate these insights to their own lives, and to learn to share their feelings with others in safe, vulnerable ways.

By attending more carefully to others, and by reflecting more deeply on their own suffering, students gain insight into the suffering of others, and a deepened empathic response is often





elicited. At the end of training, participants are asked to name one positive thing they learned about themselves and one thing they wanted to work on. One girl said, “I learned that I am a great friend. I’m loyal. And I’m reliable.” She then said, “And I want to learn how to trust people more, because I see how good it feels.” We believe this openness and willingness to connect with and trust others greatly enhances the potential for transformation.

5. Compassion

Compassion naturally arises through the cultivation of the preceding steps, yet is deepened through continued reflection, practice and social engagement. In our programs, we invite children to brainstorm ways that they can be compassionate, or ways in which their class can perform a service activity together. This can come in many forms (through “random acts of kindness” days, or volunteering at a local shelter), and can be supported and encouraged by teachers, parents and staff through community-wide work as well. We also enjoy reading stories or showing documentaries of altruism and heroism from the news to our adolescent students as well as reading books on kindness to our younger children. Real-life examples help ground the practice of compassion for our students and enable them to recognize that it is not an ideal, but rather something that they too can enact.

Future Training Directions

We raise the notion of community-organized practices because we recognize that a systems-approach to compassion training, which does not focus on the individual alone, could have a greater impact on interpersonal dynamics, and may also begin to effect structural change as well. To this end, we have begun to develop a training program for foster providers and are looking for ways to deliver this training in group foster homes for maximum effect. Last year we designed and piloted a peer-training program for students who had completed at least one round of the CBCT program, and who showed the potential to co-facilitate CBCT courses with one of our instructors. This program aimed not only to help develop a group of well-trained peer leaders, but also to help empower these adolescents to recognize and embody their strength and leadership potential. We are currently developing programs to support parents and teachers as well (see also [chapter 2](#) and [chapter 5](#)). Our experience with training CBCT in foster homes and schools suggests that there is tremendous potential for compassion- and mindfulness-based programs for addressing suffering throughout the lifespan starting in early ages. We believe the long-term success of these programs also depends upon the seamless integration of these practices into individuals’ daily lives as well as the fabric of the community.

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Sound Collage

1:57 min

Compassion in Education

Nathalie
Singer

Chapter 2

Supporting Teachers in the Classroom

Examples from Compassion Training in Schools

Teachers rarely get trained in coping with their emotions

Pupils' challenging behavior is often just an expression of unmet needs

The Circle of Forgiveness “my best experience in 15 years as a teacher”

Margaret Cullen



Supporting Teachers in the Classroom

As an instructor of “Cultivating Emotional Balance” (CEB, see Box II) and developer and instructor of “Mindfulness-Based Emotional Balance” (MBEB), I have had the privilege of working with educators in private and public schools, from pre-school through 12th grade, and ranging from classroom assistants to principals. Since 2002, I have taught groups of educators in cities around the United States and Canada and have been moved, again and again, by the suffering created by unreasonable demands on teachers. Already grossly underpaid, nearly all the teachers in my classes were engaged in teaching as a vocation. Motivated by their idealism and the wish to be of service, they were often beleaguered by the double whammy of diminishing funds and increasing mandates to focus on standardized measures of performance. Both CEB and MBEB were designed to focus on the well-being of the teacher, with no hidden agenda to bring the work back into the classroom. As such, it was often the first time that teachers had ever felt that their personal happiness and emotional balance mattered. It was also an opportunity to reconnect with their own sense of agency and purpose, as well as with one another. One teacher shared the following during an exit interview:

“You know, I really appreciated being able to just focus on ourselves. As teachers we go to a lot of meetings that give us strategies for working with kids ...but no one tells us to work on ourselves! For me, and it seemed for everyone in the class, this made it so organic in the classroom. It’s coming from your heart. It’s not a formula or a technique. And you don’t have to be happy, or feel any particular way. You can model emotional balance to the kids even when you are feeling angry or confused. What a relief!”

Cultivating Emotional Balance (CEB) [see [Box II](#)] is an eight-week secular program that combines training in attentional skills (shamatha) with emotional skills training. In CEB, there is an emphasis on the cultivation and balancing of the four immeasurables (compassion, loving-kindness, empathetic joy and equanimity, see also [chapter 8](#) for more detail) as well as instruction and practice in the four applications of mindfulness (body, feeling tones, mental events and phenomena, see [chapter 11](#)). These skills are combined with theoretical and experiential training in emotion theory, with particular emphasis on the functions, triggers, sensations and cognitions associated with the “primary” emotions of fear, anger, contempt, disgust, sadness, happiness and surprise. For the original research, educators were chosen as subjects both because of their ongoing stress and also due to their potential to significantly impact the lives of our youth. The CEB pilot, clinical intervention, and post-intervention follow-ups were offered exclusively to educators.

Mindfulness-Based Emotional Balance is an adaptation of CEB that was sponsored by the Impact Foundation. This program adds emotion and forgiveness training to the basic framework of Mindfulness-Based Stress Reduction and has been offered to educators across the US and Canada. Eight different cohorts have been studied by researchers in both of these countries and preliminary results can be accessed [here](#).

The following stories from participants in these programs illuminate the potential for cultivating compassion and emotional balance among those who play a critical role in the development of our youth. The two teachers highlighted below were able to extend compassion to their most challenging students with surprising and dramatic results. They were also representative of the kind of transformation that occurred regularly in these classes. The stories have been changed

slightly to protect the privacy of the teachers involved.

Mary

“Mary” taught ten and eleven year olds at a public school in affluent Marin County. She was soft-spoken, young, pretty, idealistic and deeply committed to her students. One morning, a boy came in to school with a knife and threatened her. This incident occurred the week after we had learned about the refractory period [see [Box II](#)]. This concept, coined by Paul Ekman, was consistently helpful to teachers in revealing how both the body and the mind are hard-wired to respond in certain ways when in the grips of an emotion. As Mary shared the story with our class, she was tearful and still visibly shaken. Though the boy was expelled from school, his friends banded together in the back of the classroom and taunted her. On so many levels, this was not “supposed” to be happening: not in Marin, not to her, not from boys so young.

That evening, we explored kindness and compassion in class. For homework, the teachers were asked to extend these feelings towards a difficult student during a daily guided meditation on kindness.



Margaret Cullen
"Kindness"

17:37 min

The following week, Mary excitedly shared with the class how she was able to turn the situation around, using what she had learned about her own emotions and through practicing kindness and compassion. She noticed, first of all, that when she thought of the boy who was expelled and his bullying friends, she became angry. She remembered that during the refractory period of anger she could only see that which affirmed her anger, thus bringing to mind those behaviors that enraged and infuriated her, and forgetting any good qualities the boys might have demonstrated at other times. Within the container of the formal kindness practice, she was able to reflect on how their behavior could be understood as a “tragic expression of unmet needs” [1] ([see video chapter Non-Violent Communication](#)) and how they, just like everyone else, wanted to be happy and loved but didn’t always know how to get their needs met. Seeing them through “the eyes of the heart”, she was able to remember moments when they had been funny or sweet, and she was able to genuinely wish them well, if only for a few moments while meditating.

A hallmark of compassion and kindness is the recognition of our shared common humanity. Typically, the more alien the other person, the more challenging it becomes to generate and extend feelings of care and concern. These boys, with their bullying and cruelty, were well outside the bounds of what felt safe and familiar to Mary. And yet, as she practiced sending them wishes of kindness and compassion, she began to see that they were human, just like she was. She remembered that they had parents that loved them, and worried about them. She remembered her own insecurities and need for approval from her peers, and imagined how this was driving their behavior. And she realized that they suffered temporary blindness during strong emotions, just as she did. She was even able to feel genuine concern for the boy who had threatened her and shared that her “heart broke open” as she imagined how painful the situation was for his entire family.

Mary made an unusual decision. In spite of my exhortation to refrain from bringing any of this content into the classroom, Mary decided spontaneously to explain the refractory period to her 5th graders. She said it was as if she could see the light bulbs turn on over the heads of this band of troublemakers in the back of the room. It was the first time they demonstrated any interest in what she had to say. As she read the relief on their faces she understood how they, too, had felt disgusted with themselves, and had been blaming themselves for their behavior. The refractory period concept allowed them to understand themselves in a way that was both new and normalizing. They had also come to expect punishment, anger or disgust from others. When they were met not only with understanding but with a way to understand *themselves*, a pattern was broken that could have kept snowballing until they landed in juvenile hall.

For Mary, the practice of extending kindness and compassion to her most difficult students allowed her to be more creative and spontaneous as a teacher. Imagining the suffering of these challenging students allowed her heart to soften towards them. As a result, she no longer needed to “prove” how bad they were, and solidify her case against them. Before Mary could reach these kids, she had to be willing to let go of her anger towards them. When she did, she had access to her natural insight and creativity as a teacher, which included the novel idea of teaching the refractory period to 5th graders.

Linda

Linda taught seven and eight year olds at a public school in a very diverse community. You couldn’t hope to meet a more direct, honest and no-nonsense person. Though she loved her students fiercely, it was without frills or sentimentality. She was great to have in class because she would not only challenge me with her doubt and skepticism, but her expressive face would register her confusion and distaste for any language or ideas that might have a hint of “new age nonsense”. Linda signed up for the class because she was feeling very challenged by one boy in particular (Adam). Nothing seemed to work with Adam; in her mind she was “taking him home at night” with increasing frequency.

In MBEB, forgiveness practice has been added as a precursor to kindness and compassion cultivation. By releasing resentment and anger, it is often easier to access warmth and care for ourselves and for others [\[see also chapter 4\]](#). Linda’s process of transformation with Adam began with forgiveness. The following quotes are from her exit interview:

“The forgiveness CD starts with forgiving yourself, which is really trippy because, you know, I’m not quite used to that language.



Margaret Cullen
"Forgiveness Meditation"

12:03 min

But I have to say I did it for the first time yesterday and I was very emotional after that meditation, and clearly something happened. I know that I carry a lot of resentment towards Adam because he has been so challenging to handle. And I suddenly realized that I’m holding him responsible for





something that is largely out of his control. You know, he's seven years old! It doesn't really matter if he's doing these things on purpose, he's only seven! So, from the practice and the reflection, I could start to see that it's impossible for him to turn himself around without love and guidance."

A few weeks later, Linda was excited to share a remarkable turnaround she experienced with Adam. After practicing kindness and compassion in class and at home, she found herself responding quite differently than she had in the past:

"Adam was having a total and utter meltdown on the bus on the way back from a field trip and I was doing my usual, 'I'm not going to put up with it, this is not appropriate, and I'm just going to ignore you' and he just wouldn't stop. So then I thought, well this isn't working and he is giving me a headache so I said, 'you know Adam, put your head here (pointing to her shoulder), put your head here and just relax'. He fell asleep in, like, 30 seconds. Once I softened with him and stopped being mad at him with that face of 'I'm definitely mad at you', he could let go. Just like that, his head on my shoulder. It was so clear that he needed me to be more tender with him and, though I may not have a great batting average overall, I'm really proud of the moments that I've had like that with him. They've turned things around so quickly! They wouldn't have happened without the role modeling in class, the discussions around kindness and forgiveness, and all the practices we did. Once I understood him as *unskillful* rather than *bad*, it became a question of how to deal with his unskillfulness. Not by being unskillful myself, right? But the part that was so frustrating for me before the course was that I *knew* I was being unskillful but I didn't know how to stop being unskillful, right? And the answer came, not from a technique or a strategy, but from being tender and kind, and honest with *myself*."

During our class on compassion, I shared a story from the Babemba tribe in Africa. Linda's facial expressions were almost comical in their exaggeration: first skepticism, then scorn, then disdain, but then it looked like the light bulb went on over *her* head. Also in the exit interview, Linda shared this remarkable story involving another student, Sam, and the power of responding to bad behavior with love and compassion:

"Another thing that I was highly skeptical of was the story she told us about a tribe in Africa – I can't remember the name, but she said that when someone in that tribe does something wrong, everybody in the whole village stops what they're doing and makes a big circle. The culprit is put in the center of the circle and everybody just reminds them of what is good about them until they remember their own goodness. You're a wonderful son, you're this, you're that. Right? And I'm rolling my eyes as I listen to this because it sounds so flakey and Pollyana – you don't do that with children who are misbehaving! And then, I don't know, some part of me that had been pushed down a long time ago actually felt touched by the story. And I started to ask myself, 'Why do I need to be so scathing about this? I mean, what's in it for me to be immediately dismissive of this?' When I went to school the next day, I told my colleagues about that moment and they all just said, 'Are you kidding? Are you going to try that in your class?' And I said, 'No, I don't think so. I don't think it's going to present itself but, hey, it's a different idea and I'm not sure about it. Maybe it *will* come up.'

Two weeks later, another child, Sam, not my most problematic child, was having a really difficult recess. He'd gotten into some kind of conflict with his friends. This was surprising because he's generally well-liked, but he came back miserable, they all came back miserable, and I knew no teaching was really going to happen because there had been so much upset over the recess break. We were kind of skirting around the issue but it seemed to come down to the fact that this kid was just being a pest, you know? Not letting people play the way they wanted to play, interrupting and calling out – you know, the sort of things that happen when you get pesty. So I

said, 'You know, Sam, I'd love to try this experiment and it's totally within your rights to say no, but I think it would be awesome to try it.' Sam was hesitant, but he agreed. I described the process that had been told to me: how we stop, make a circle, and, rather than harping on the thing that was wrong, we remind ourselves and the person why we love them, what makes them a valuable member of the community and how their behavior right now is making it hard for us to function as a community.

So I put him in the middle, literally, on this rug. We all sat around and I said, 'you're allowed to pass but I'd really like you to think about it before you pass and then I'll come back to you later and give you another chance to share'. Oh my God, it is honestly going to go down in my memory as one of the best experiences I've ever had as a teacher. They said some things you might expect a 2nd grader to say like, 'you're a good friend', 'you're good at basketball', but then they just blew my mind. One of my students is very self-absorbed, and I never would have imagined that she had any degree of awareness of those around her. She said, 'I love how when you come into the classroom in the morning, you always say good morning and you have this big smile on your face and it looks like you're having a great time all the time. I don't always feel that way, and when I look at you I feel better.' And she's not even friends with him! And then it just got better. They kept saying things like, 'you're an awesome apologizer', and 'when you apologize, I'm not mad anymore.' I literally teared up. And then they're looking at *me* like, 'what's wrong?' And I'm like, 'absolutely nothing'. It's just so beautiful. The one little girl who had chosen to pass was one of my strongest students so I thought, 'Hmm, I wonder if she just doesn't have it in her, emotionally, to go there?' Still, at the end I came back to her and asked if she was ready to take her turn and she said, 'Well, I don't want to hurt his feelings'. And I thought, 'Hmm, okay, maybe we should pass' and then she said, 'But I think I know how I want to say it.' OK, so at this point he's showered with love and I thought, okay, one little comment won't kill him. And he's beaming. She said, 'Well, last year I think school was really hard for you and you struggled a lot and I remember thinking that I was worried that you weren't going to make it. And then this year you've just worked so hard and you had these really great breakthroughs and you're just so smart and I didn't know that about you last year and now I know that'. And, honestly, that was the home run because everyone else had said things that he already kind of believed or knew about himself but she was saying something that I think he actually didn't know about himself. And she was articulate enough to really name it.

It was really lovely, so lovely. The whole conversation took about 35 minutes, but I'm pretty sure the rest of my academic day would have been lost otherwise. When we were done I said, 'now we need to get to work' and we did. It was as if the clouds cleared and there was a very different vibe in the room. It was pretty powerful and became another time in this program where I thought, 'I don't know what to say about this', because in the fifteen years that I've taught I've never had that kind of experience . . . where I could trust that my kids could be so loving with one another, you know?"

In teaching kindness and compassion, it often comes down to trust. The pedagogy and practices are not intended to teach something new. Instead, they are a way of uncovering, revealing and reconnecting with what is already there. So often, when that connection becomes broken, it is hard to trust our own hearts, or one another. It is even hard for teachers to trust their young students, as Linda so poignantly articulated. It takes courage and an open mind to challenge habitual ways of responding as both Mary and Linda were able to do. Through the formal practices of kindness and compassion, Mary short-circuited her habitual mental pattern of blame and anger, and uncovered the care and compassion that were always there. This allowed her to access creative ways of reaching her most difficult students. Linda experimented with her softer and more tender side, and challenged her belief that toughness and punishment are the most effective ways to elicit behavior change.





For many people, the invitation to experience and trust one's own emotions runs counter to years of conditioning and acculturation. Both the risk and the payoff for opening the heart are captured in the following quote from another teacher's exit interview:

"For me this comes after a period of having really cut myself off from my feelings. I wouldn't allow myself to feel anything bad, which had the unsurprising effect of not allowing myself to feel anything good either, despite a lot of good things going on in my life. I didn't feel anything deeply because I pushed everything away. For years I believed that vulnerability would be scary – and to a certain extent it is – but it is also a real gift. I'm so grateful. This experience has helped me to manage that vulnerability and to experience it as a treasure instead of being afraid and pushing it away again and again.

Life presented me with an opportunity to practice this week. I wanted to challenge my students to break their own emotional barriers. I was surprised by how well I was able to model what it means to listen empathetically. I actually got tears in my eyes when students reported something that made them cry. I was able to bring my emotions to the surface really quickly and model for them that it's OK to open up. This program has made me feel comfortable and relaxed with my own emotions, and, in turn, be a better listener and a kinder person. I'm even sleeping better, and I think it's because I go to bed with the thought that I did something nice during the day."

Although it is hard to imagine how compassion, forgiveness and emotional balance could be inappropriate for teachers (or for anyone!), we have learned from experience that it isn't right for everyone and hope that you can benefit from our mistakes. In all but two of the many programs I have taught, the teachers self-selected themselves into the program. This is essential, and is a big part of insuring success. Needless to say, those who elect such a program are already inclined to value introspection, self-awareness and virtuous qualities such as kindness and compassion. If they are skeptical, it is shared in the service of challenging their own resistance and helps everyone to embrace and understand the obstacles to cultivating greater balance and open-heartedness.

I have encountered two situations in which the participants did not self-select and, in each case, there were significant challenges. The first, and most difficult, was a weekend intensive program where a new principal mandated participation by the whole staff in the hope of changing the school culture. To make matters worse, he did not let the teachers know beforehand what we would actually be doing and they were expecting something quite different. By far the nadir of my own teaching career, I developed a new level of compassion for teachers working with bored, disinterested and challenging students. Half of the group migrated to the front of the room and were fully engaged and interested. The other half were in the back, whispering and laughing, walking out, playing games and throwing toys and papers at one another. Sadly, it became more divisive than it was unifying as it solidified the disdain with which each group held the other and was the beginning of the end for this principal.

In the second case, we offered the program for college credit in a large city in Colorado. At the time, these credits affected the pay level for teachers in the district so several people signed up hoping for an easy way to achieve a salary increase. Though they admitted this in our opening introductions, it did not make things easier when they chatted during meditation, noisily left the room, checked their cell phones or, in one case, actually brought crayons to draw during the meditations!

Beyond the necessity of self-selection, these programs are designed to promote personal

transformation and can bring up emotional pain and unresolved issues. This is not usually a problem if the instructor has been well trained, has looked deeply into his own heart and mind, and has good referral sources when needed. When suspending disbelief, challenging distorted thinking, risking vulnerability and open-heartedness, students are required to make a leap of faith. Ultimately it is faith in themselves but, in the moment, the faith is “borrowed” from the instructor. Without profound conviction in the value of what is being taught, that is wholly based on personal experience, the instructor may not inspire sufficient confidence and safety to make the leap from the familiar and habitual into the unknown.

“When I let go of what I am, I become what I might be.”

(Lao Tzu)

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Chapter 3

Compassion-Focused Therapy

Working with Arising Fears and Resistances

For some people beginning to experience feelings of care and affection from others and towards oneself is frightening

Common sources of these fears are unprocessed anger to others and shame linked to disliking oneself or even self-hatred

As anger and shame are addressed, this can ignite intense grief and sadness at how shame has trapped us in aloneness and separation

Paul
Gilbert



Compassion-Focused Therapy

Many approaches to compassion recognize that it is the blocks and fears of compassion that stop us from cultivating these core qualities within us. In exploring the fears and resistances, it helps to understand compassion as having three types of focus. There is the compassion that we feel and express towards others; the compassion that we are open to *from* others; and *self-compassion*[1] (see also [chapter 16](#)). While some people can be reasonably comfortable with being compassionate to others, receiving compassion is a more complex and blocked process. Self-compassion can be even harder.

I became aware of the fears of compassion in therapy over twenty years ago. I was trying to help very depressed people stand back and look at some of their negative self-views (e.g., feeling inferior, useless and unlovable) in a more realistic way (using cognitive therapy). However, in trying to change, although they could be taught to be more balanced, fairer and less harsh in their self-judgment, they often did this in a coldly logical or even aggressive way. They might think things like, “come on you know you have achieved things and are not a failure – and look what your family does for you – how can you think you are unlovable – stupid!” So I realized that we had to be much more focused on *the feelings* people were generating when trying to help themselves – cognition alone was not enough. The self-focused feelings that I tried to help them accompany new ways of thinking were those of encouragement, support, understanding inner kindness and warmth[2],[3]. In one type of practice I asked people to imagine a very kind, wise individual who really cared about them, talking to them about these alternative ideas and how that would feel if they accepted them. What took me by surprise was the difficulty patients had in trying to generate kind feelings for themselves or be open and accepting to them. Some were outright resistant and refused. They had ideas of “I don’t deserve kindness; it’s a weakness, it’s letting me off the hook; it feels too strange; kindness never lasts.” Others said, “I hate myself and could never imagine being kind to me.” Another common response was sadness. The very idea that one could actually be lovable seemed to touch a deep yearning for connectedness and loneliness that could feel overwhelming

Being open and trusting of the kindness of others was tough for some people. For example, sometimes patients would say things like, “well I know people can be kind to me, but I often wonder why”; or “if you really knew me, you wouldn’t be kind”; or “you are being kind because that makes you feel good”. Noah Levine offers valuable insights into the difficulties of accessing compassion and feelings of kindness if you come from a background of violence, addiction, abuse, etc. – based on his own personal experience:

Noah Levine on Difficulties with Compassion

And of course, kindness to others can be blocked because we may feel they don’t deserve our kindness or will simply take advantage.

The Issue of Deserve and the Disowned Inner World

Compassion evolved with mammalian attachment and friendship-motivated caring. It is rooted in the capacity for affiliative feelings, for being loved and being loving (see [chapter 7](#)). Indeed, researchers have now shown that we are physiologically best regulated when we feel loved, wanted and connected (rather than unloved or alone) and are loving (rather than being indifferent, disliking or even hating)[4]. So why do these important qualities of ourselves get so blocked? Why

do we find it so difficult to feel loved and to be loving to ourselves and others? Well, there are many reasons but our research has indicated that one of the core problems comes from issues of *shame*[5],[6]. When imagining feeling completely loved, there can be a part of us that feels, “yes, but *this part of me, or these feelings, or these fantasies, or these past actions* are bad, and you can’t have compassion for them”.

This, of course, is a tragic situation because this is precisely why compassion is so important. We need compassion to deal with a whole variety of desires, fantasies, fears, rages, hatreds, traumatic memories that can feel bad to experience and that we want to disown or run away from. Freud, of course, saw this as the basis of repression and our trying to exclude certain feelings and fantasies from even reaching consciousness. When we create a sense of self we also create a sense of the self *we do not want to be*, and who we do not want others to know about. It is these aspects of our minds that get pushed into the shadows and we can keep the light of compassion closed to. This is often the basis of feeling “not deserving” because we are not worthy, good or “wholesome and pure” enough.

The compassion and wisdom embedded in the evolutionary model (see [chapter 7](#)) helps us understand that we have these desires, fantasies, hatreds and lusts by virtue of being an evolved, gene-created human being, who’s grown up in a certain social context – none of which is “our fault”. There are no fantasies we can have that probably millions of other humans haven’t had at some point. This type of insight is very helpful in de-personalizing and de-shaming these inner experiences. Reducing shame and self-blaming/hating, and developing compassion, enables us to turn towards, and become familiar with, these darker aspects of our evolved minds (in shame we try to run away from them). Then we can learn how to see them working in us, we do not overly identify with them, and are able to choose not to act out unthinkingly. We may feel that surge of anger, fear or lust but are able to hold it compassionately as a construction of our mind. So compassion is not about ascending to some purified angelic state but descending into the darker areas of our minds – into what Jung called the shadow self[7].

Self-Forgiveness

Compassion enables self-forgiveness, while understanding that forgiveness is a process that can begin first with disappointment or even self-hatred of past actions. The soldier who had a panic attack and hid behind a wall rather than trying to shoot the enemy and protect his buddies; or the soldier who did shoot the enemy and realized he’d killed a family with children; a drug addict stealing from loved ones and being aggressive – are caught up in dramas of life that they would never choose. Finding compassion and forgiveness can be very difficult and in fact one reason for veteran suicide. So the lack of self-forgiveness, and the feeling that one doesn’t deserve compassion, in such contexts, is very serious.

The Link between Shame and Grief

But let us assume that we can see the value of compassion and would really like to explore and cultivate it. This means we have to open up a bit. But then there is the issue of shame, which is the most *disconnecting* of all emotions. We do not reveal that which we are ashamed of – it stays secret, like a toxin in the heart, with fear of revelation and being cast out. It is the story of Adam and Eve; that we can become offensive in the eyes of others, rejected and doomed to wander alone. So the healing of shame begins to open us up to the potential to feel loved again (or maybe for the first time), connected and valued; as a genuinely welcomed person in the world – but beginning to feel this is not so easy. One reason is because we have to take the risk of being vulnerable to rejection. What will others discover about me if I open up to them about what’s

happening inside of me?"



Paul Gilbert
"Fears of Compassion"

1:24 min

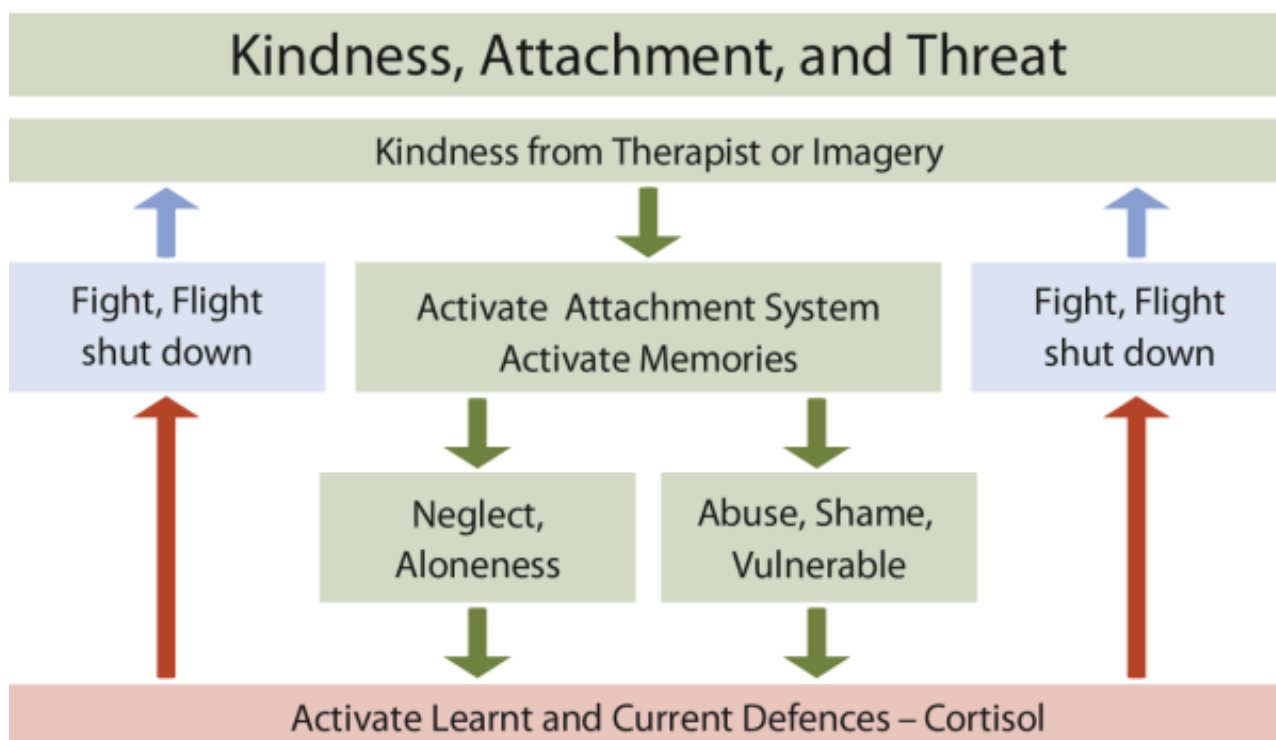
However, a less commonly recognized fear is the overwhelming sadness that can lie at the heart of many shame-fearful people. As we “open” to others, we see how shame has isolated us in a deep feeling of aloneness and separation from others. The experience of “coming home” or “beginning to feel the possibility of being lovable or part of a network of people” can activate enormous grief and sadness. Patients can stumble at this point because this sadness can feel overwhelming, out of control and perplexing. Not uncommonly, then, when some people begin on the compassionate path they are surprised by the fact that, rather than feeling happier and softer, they can actually feel sadder and more in touch with loneliness. They do not want to go there, especially when this sadness is linked to feelings of aloneness. In the histories of these individuals they may tell stories of how they were criticized, hit or abused by their parents and then sent to their rooms where they stayed on their own in a high state of distress – no one came to comfort or rescue them. Some have felt shy as children and that they never really felt they “fitted in” or were part of any social group or friendship. Compassion can open them to these body-felt memories and they may turn away from the compassion journey.

Emotional Memory

As indicated above, emotional memory is incredibly important for understanding how any kind of emotion works, including affiliative and compassion-based emotion. For example, most of us enjoy holidays and we also enjoy feeling sexually aroused – at certain appropriate times anyway. So supposing you see something on the television that stimulates your thoughts of holiday or maybe a little sexual interest. For most of us, activation of these basic systems in our brains is pleasurable. But suppose you had been raped on holiday (sorry to be so graphic but we need to make this point clearly). Then those *same television stimuli* would generate a very different pattern in your brain. Seeing something on television would now actually be quite *traumatic*. This example helps to illustrate that what would normally be positive emotions can become associated with very unpleasant, even traumatic experiences. So it is with affiliative stimuli, too; a stimulating system that is linked to getting close to others and opening to them can actually activate feelings of trauma.







Ways kindness and compassion can relate to threat and avoidance.

This is what can happen with the attachment-affiliative system if there has been trauma associated with attachment figures. This is why sometimes patients can actually respond quite negatively to the compassionate behaviors of a therapist because, unbeknownst to the therapist, in subtly stimulating the feelings of closeness and being cared for, he/she is also stimulating trauma memories. For some years now we have used a very simple model to outline this – given above.

Fear of Closeness and Emotional Memory

A difficulty with compassion is that it's a relational process not an individual one. So, first we need to be attentive to our experience and accept what it means to be held with love, affection and compassion in the minds of others. Ideally, this begins from the first days of life, from the mother's love, and becomes internalized. But for some, this doesn't quite happen that way. For some people, closeness to others is frightening, either because of genetic sensitivities and/or because (say as a child) they actually receive rather little attention and more threat than affection. One of the toxic combinations in early life is the parent who is wanted as a source of calming and love, but who is experienced as unpredictable, dismissive, potentially aggressive and shaming, or is too busy to be there "so becomes the wanted but absent other". These children are confronted with a terrible dilemma. In trying to draw close to the parents for love and affection, they will also activate fears of aggression, being shamed or left alone. Others may recall that when they were in distress, their parents rather dismissed them, or told them they were being childish or even became angry with them. These individuals have learned to be very wary of feelings of closeness and connectedness, especially feelings of sadness and yearning for connection, because it's at these times they feel most vulnerable to getting hurt – to being shamed, rejected or abandoned. For other children, the parents were directive and intrusive, low on praise and high on criticism. These children came to fear closeness because closeness brings scrutiny and scrutiny brings criticism and shame. We can call this shame from intrusion – if people get too close, they can find out things about you and then be critical, rejecting or hostile.

So we now have two problems. The first is that entering into the experience of receiving compassion can activate a yearning and the grieving for connectedness that touch our deep innate

social nature. But then may come the emotional memories associated with what has happened in earlier “close relationships” that gave birth to the fears of closeness and connectedness. This can create an almost irresolvable conflict of both starting to yearn for compassion but also becoming deeply fearful of feelings and memories associated with this yearning. For some people this powerful conflict between threat and affiliation can lead them to turn away and even disassociate from or close down the whole compassion journey because compassion is somehow seen as very unhelpful, or even dangerous!

Even feelings of safeness can be tricky. A patient told me how she had memories of playing with friends in the garden one day – a lovely blue-sky day, just having fun. Then out of the blue her mother, who was sadly an alcoholic, came rushing into the garden screaming and hitting her because she’d been trying to sleep and the noise of the children had woken her up. My patient looked at me with sadness and said, “you must never allow yourself to let go, to have fun, to feel safe because that’s when you never are!” We call these conditioned emotional memories, where one emotion starts to trigger another emotional memory because of how they’ve been paired together in the person’s life. Indeed, for this lady, beginning to feel safe, connected and with kindness caused almost panic-like feelings.

Another patient wasn’t “frightened” of her parents but told the story of her agoraphobic mother and how at various times she would look forward to going out, maybe to the seaside. One time she recalled wanting to go and see Santa. But commonly the children would get excited and get their coats on, but then mother would have a panic attack, and they were not able to go. Sometimes father would be angry and mother would become tearful. So this patient’s experience was “I learned never to hope for too much really; I knew you couldn’t rely on other people to follow through on things or help you, and in any case you’d be a burden to them if you wanted too much”. For this lady, beginning to have compassion actually started to generate feelings of unrecognized anger towards her mother, which she also felt very guilty about and tried to suppress. “How can you feel angry with somebody who is so frightened and only trying to do her best? How can you feel angry with somebody who you know loves you and you want to love?” But, of course, when we stand back we can see the sadness and frustration in the young child because she wasn’t able to do the things that other children could and often had her excitement dashed. It’s quite normal to feel angry in those contexts. But it can be difficult to recognize anger as a normal process if you see it as evidence of being bad in some way. It doesn’t make one a bad person to feel angry for that type of life – these are just normal reactions that we can then choose what to do with. So compassion for these types of emotions and dilemmas becomes very important. Emotions are not simple and are often in conflict (we can be angry at getting anxious and anxious at getting angry). Our emotions can seem at odds with our desires, for example feeling angry with people you love, or falling in love with people you know are destructive to you.

So we can see, then, that compassion can lead to us beginning to experience affiliative emotions but that can lead to grief, and feelings of closeness can stimulate fears of closeness; looking at the rupture in early relationships can reveal anger that we might feel guilty about. So the paradox is that compassion does not necessarily lead to affiliative emotions in the first instance – the reason being that it engages with our memories of being cared for and painful experiences associated with those memories. So compassion takes us down into the mud of suffering and reveals things that perhaps we were not aware of. If we “hold” here with the compassionate focus we can heal.

Different Types of Self-Criticism and Self-Hatred

Self-criticism, when associated with negative emotions towards the self, such as frustration, anger, contempt and even hatred, is one of the most toxic processes to developing self-compassion[8].





While it's important that we are able to recognize our mistakes and take compassionate actions for reparation or their avoidance in the future, what is called compassionate self-correction[3], this is motivated by a genuine wish to be compassionate and effective in the world, and so learn from our mistakes. This also depends on more than affiliative emotion and requires capacities for mentalizing, moral maturity and at times courage (see [chapter 7](#) and Gilbert, 2009[3]). Some forms of self-criticism, however, are not motivated by these desires but by the *fear of* mistakes and how it reflects on us and makes us vulnerable.



Paul Gilbert
"Patients"

0:47 min

There are different types of self-criticism, which function in different ways[9]. This one type is linked to the drive system. Here, people are critical because they wish to push themselves on to achieve, avoid making mistakes, and ensure they try harder. Some are fearful of being seen as inadequate if they do not keep achieving; they are striving to avoid inferiority or “losing out”[10]. Although critical, they believe they can do well. But if they fail, they can become angrily self-critical. You would have thought that self-compassion would be a good antidote for self-criticism and fear of being seen as inadequate or shamed. However, they can believe that compassion is a “soft option” that will make them weak, less interested in striving and thereby more vulnerable to not actually “making it” and being shamed and rejected and/or losing or missing out. As one patient said, “if I took your compassionate road I would not try so hard or beat myself up, and then I would slow down and never be successful”. So these individuals fear compassion because they think it will undermine the drive system. In some high drive-based disorders such as anorexia, people can fear giving up their “self-bullying voices” for fear that they will not know who they are or what to do[11]. Individuals who are using drive, control and achievement to ward off shame fears often end up bouncing backwards and forwards between drive and threat throughout their lives and only really feel temporarily okay if they are succeeding. The idea that there is a different way of relating to themselves with kindness that need not reduce their drive, that will help them when times get tough, can take some time for them to learn.

A second form of self-criticism involves far more disgust, contempt and a hating orientation to the self[8]. These individuals don't just get frustrated and angry with themselves, they actually feel contempt or hate for themselves or parts of themselves. They are more likely to come from abusive backgrounds. They can often find it difficult to deal with powerful emotions and may resort to self-harm in order to stop the feelings of self-disgust and self-loathing. As one patient, who had been sexually abused from a young age, said, “I hate everything about myself; I hate the way I look, I hate the emotions that feel as if they will blow my head off; I hate being me!” For her, the road to compassion was very painful, because compassion involved understanding that hate always arises from hurt – we hate that which hurts us and therefore we have to understand where the hurt lies. Also, hatred of the self can hide fear of sadistic feelings towards others (as one understands we might have from an abusive background). If one is wanting to find a way to feel loved and be loving, then becoming aware of these feelings can be quite difficult. But we can recognize them as part of common humanity, tragically all too commonly acted out in human history, and though unpleasant, they are not our fault but part of how our brains are. Once we understand them, do not self-blame, we fear them less and might even be compassionate to them

and no longer act them out. And of course the entrepreneur uses his capacity for sadistic fantasies to write books and make a lot of money!

Self-compassion can get blocked when people hate themselves. This is because at first they are contemptuous of it and see it as weak, thinking “why would one be compassionate to what one hates and wants to get rid of?” They hate themselves because they didn’t stop the abuse; because they can’t stop their drug addiction; because they are too fat and can’t stop eating; because their mind is full of awful sexual or aggressive fantasies or actions. But it is at these points that compassion is absolutely the essential process. And again, if we contextualize our brains, in an evolutionary context that we didn’t choose, and as a social creation that we didn’t choose, compassion becomes easier. We can stand back and recognize that we need compassion for all these horrors and fears of the mind – they are a universal human issue. Given that compassion is linked to the desire to prevent and alleviate suffering, then understanding these aspects of our minds, and how to work with them rather than suppress them, becomes essential. Although destructive emotions are sometimes seen as poisons this is a bad analogy. A poison is something that is alien to the body and needs to be expelled and we talk of cleansing. Destructive emotions are definitely not alien to the body and cannot be expelled or cleansed in that way. Rather they require compassion and wisdom to understand their source and how they work in us because they are one potential within us that we can know but choose not to bring into the world.

Fear of Compassion for Others and Humanity

Compassion for others is complex and can relate to the desire to rescue others (as in the rescue services), courage, to moral values and the way we think about and work for fairness and justice. Learning to direct compassion (which means sensitivity to suffering and trying to do something about it) to others whom we love is relatively easy. It is much tougher when it comes to people we don’t know – those suffering in another country, maybe – and of course those we do not like or who have hurt us. This is partly because our evolved minds are far more keen on helping those close to us rather than distant, on vengeance and retaliation rather than forgiveness. Some people are cynical about the value of compassion and believe it makes those who offer it seem weak or allows them to be taken advantage of[1]. Some argue that humans are basically a nasty species. “Look at human history,” they say, “our fascination with violence and torture, the Holocaust and ethnic cleansing, greed, and all the children being beaten and abused right now.”

Now, for sure, humans have the potential to be demons or angels, but this is the whole point of compassion training. We are at the point in our history where we are waking up to that responsibility – but it’s a very painful awakening because we have to see just how cruel and dangerous we can be as a species and how fraught with suffering and tragedy life is. Compassion never grows out of delusions of what we are up against, the savagery we are capable of, but it is precisely because we do see these potentials in us and know they are so easy to provoke and cultivate that mindful compassion training is essential[7].

Summary

Compassion training can benefit from engaging with the fears of compassion. The fears of compassion relate to 3 domains:

1. Fears of being open to compassion from others due to the fear of closeness, its unreliability, shame, or being overwhelmed by grief for the ending of loneliness.
2. Fears of being compassionate to oneself because of the sense of not deserving, belief that criticism will help one succeed, and feelings of self-hatred and shame for one’s internal

fantasies or emotional life.

3. Fears of being compassionate to others because they don't deserve it, and belief that it will make one weak and allow others to take advantage.

Compassion training, therefore, can help people recognize, normalize and work with and through these processes. Recent research suggests that compassion training can reduce the fears of compassion^[12].

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Chapter 4

Cultivating Alternative Paths to Compassion

Generosity, Forgiveness and Patience

Expanding generosity naturally reduces our self-centered attitude

Forgiveness comes easier when we distinguish the person from their actions

Patience is the strength and courage to discipline our restraint from harming others

Barry
Kerzin



Cultivating Alternative Paths to Compassion

Introduction

Approaching the cultivation of compassion from many paths ensures a better result. Not only can we directly practice compassion, we can also indirectly practice compassion. This dual approach maximizes the cultivation of compassion. By reducing and eliminating hindrances to compassion, we expand our compassion and purify it with fewer strings and expectations attached. These hindrances are rooted in our selfishness. In this chapter I will review alternative pathways to compassion through generosity, forgiveness and patience and focus on the experience of cultivating these positive emotions. These indirectly enhance our compassion.

Generosity

Generosity is a natural outward expression of an inner attitude of compassion and loving-kindness. Generosity refers not to just giving materially, but to generosity of the heart. Generosity breaks our tight grip on miserliness, which wants to hoard and keep everything for our self. Miserliness feels very selfish. It blocks us from sharing with others. This is true not only for material giving, but also for emotional support, protection and love. So generosity takes several forms. First, there is giving material things. Second, there is offering freedom from fear. This means providing safety and a sense of protection. It means providing security, often on an emotional level through non-judgmental listening and genuine sincere concern. Third, there is offering of spiritual counsel. This is offering advice and guidance to see the bigger picture in the context of interdependence. This means guidance to view the situation from wider perspectives. It also offers advice to counter the destructive emotions. Fourth, there is giving love. By gradually expanding our generosity we reduce our self-centered attitude. The more our generosity expands, the more our heart opens, fueling the fire of genuine concern for others. Let me share an experience of giving when I gave a significant portion of my savings to my teacher. At first it was quite scary. “What will I do without that money?” I thought. Then I decided to give it anyway. Afterward I felt so good and happy. Later I gave more. It felt like a weight was lifted from my shoulders. My chest seemed to open up, allowing deeper natural breathing. I haven’t shared this story until now, so it has remained like a gem in my heart.

For the rich, wealth beyond a certain level does not bring any real value unless this wealth is put to good use. After a certain point, greater luxury and extravagance have no real effect on one’s comfort. Eventually wealth becomes merely a series of figures on paper or a computer screen. Even for those with limited means, an attitude of generosity has huge benefits in opening the heart and bringing a sense of sympathetic joy and connection with others as I related in my story above. Generosity can be included in whatever activity we do. It becomes a way of life. When I am open, there is a feeling that I would like to give joy to anyone I meet. Of course my heart is not always open like this, but sometimes it is. We can be kind, attentive and honest in our dealings with others. We can offer praise when appropriate. We can offer comfort and advice when needed. Simply sharing our time sincerely with someone else opens our heart. These are all forms of generosity that do not require wealth.

When practicing generosity, as with all the other complementary practices for enhancing compassion, we can deepen the practice by grounding it in wisdom. Wisdom does not take giving for granted. Instead it examines more deeply the nature of the giver, the gift and the act of giving. By recognizing these three to be merely names and concepts, we feel in harmony with reality.





Thereby the force of our generosity is enhanced. There is more power to transform our self-centered ego that grasps so tightly to our distorted perception of who we are (see also [chapter 9](#)). The resulting detachment is not aloofness. It is the opposite. It brings us closer to others by eliminating the need for continually focusing on me, me and me. Occasionally when the wisdom feels close and I am able to take a glimpse, the heart feels open and happy. This is not an excited happiness. Rather, it is peaceful with a feeling of vastness. Breathing is easier, fuller and slower than normal. I feel like I am smiling from deep within myself.



Barry Kerzin
"Generosity"

1:12 min

If what we give is likely to be used to harm others, it is better not to give. It is important to take joy in giving. Often we dedicate giving to some higher altruistic goal. Mentally giving our food, beautiful scenery, delightful sounds of nature and music, and a feeling of joy to everyone in need is worthwhile. Then when I am able to offer everything I encounter that is wholesome to the enlightenment of everyone, this feels so freeing. Everything seems okay and harmonious. This helps ensure that our generosity is not limited due to partiality or bias. Rather, our generosity is directed towards the betterment of humanity. Dedication allows the giver to experience the sympathetic joy of giving to another. Dedication directs the positive energy to the welfare of all. Feeling this joy is important. It becomes a strong motivator for us to repeat acts of kindness and charity in the future. The wonderful thing about giving is that it not only benefits the recipient, it also brings profound benefits to the giver. The more one gives, the more one enjoys giving. It seems to snowball for me. When I am in the giving mood, I just want to keep giving. The inner joy is delicious. Mentally giving everything delightful to all living beings has become a habit, especially before eating. Food tastes better!

Honesty

Honesty is the foundation of an ethical lifestyle. Without it we are lost. We have no frame of reference out of which we can operate. We lack an ethical compass. Honesty is directed towards others and also directed towards our self. The more honesty we cultivate, especially towards our self, the more we become transparent. Our inner world becomes more congruent with our outer behavior. Honesty and transparency foster respect. Respect is once again both towards others and towards our self. Cultivating respect towards our self makes it easier to respect others. Then it is easier to feel happy when others experience success and joy. We become gentler with ourselves. This naturally softens us to become gentler with others. Moreover, this newfound honesty and mutual respect not only softens and makes us gentler, it also cultivates trust. As with honesty and respect, trust is mutual. We find it easier to trust others and be less suspicious. We also find it easier to trust our self. This leads to reduced guilt and more healthy self-confidence. It increases our capacity to spontaneously laugh. We can laugh at our self in a positive way that is non-judgmental. We are able to genuinely laugh at our self without putting our self down. We become more relaxed and act more naturally. Honesty is the foundation for a healthy, balanced, happy life. It is our ethical compass. Without honesty we drift off course, sometimes unknowingly. Honesty is the foundation for mutual respect. Respect for others moistens our heart with love and

compassion. Respect for our self brings healthy self-confidence. Healthy self-confidence gives us the courage and strength to reach out to others. Thus, honesty is the bedrock of compassion.

One method of ensuring honesty is mindfulness (see also [chapter 11](#)). Mindfulness in this context means observing what is happening inside. It means directing a portion of our mind to keep a watchful “eye” on our thoughts and feelings. A portion of the mind also acts as a good spy, observing our words and behavior. When this mind, focused inward in the present moment, recognizes a negative intention, we then have an opportunity to redirect our negative intention to a positive intention. For example, if we notice we are about to tell a lie, or we notice we are actually engaging in telling a lie, then we have the opportunity to stop this deceitful behavior. In this way, we keep track of our words and thoughts to ensure they remain honest and positive. When we find we have deviated from being honest, at least we recognize this. Equipped with the understanding of the importance of honesty in maintaining a peaceful, happy life, when we tell a lie, we can apologize and tell the truth. So mindfulness used in this way becomes a powerful tool to ensure that we lead our lives in a positive, healthy way. This helps us avoid a negative and unhealthy lifestyle. It gives us the opportunity to reset our course when we have drifted into negative ways of life. There is a definite feeling of well-being when mindfulness is active. One feels more present with a vast perspective. Even when the mindfulness discovers some ill intention, there is calmness. I recognize I have once again steered onto a wrong path. There is no feeling of guilt. Rather, a sense of steering the boat back onto the course of honesty. There may be some regret, but this is not the same as guilt. I understand if I was dishonest, I have recognized it and will sincerely try not to repeat it, especially when faced with a similar situation in the future.

Forgiveness

Forgiveness gives us the freedom to let go of hurt. It liberates grudges against others that have been buried, sometimes for a lifetime. Even though the hurt is suppressed, it still keeps a dark cloud over our mood. Forgiveness is the solvent that dissolves the glue that holds our self-righteousness tightly. It softens the feeling of, “I am right and you are wrong. You hurt me.” When I am able to forgive, I recognize the humanity in others. None of us are perfect. We all make mistakes. We are all deluded. We are all looking for happiness but we don’t know where to find it. Thus, we harbor many wrong, harmful intentions, thinking that they are in our best interest. The harm that has been done to us is of two kinds. It may have been intentional or unintentional. If the hurt was unintentional, it is easier to forgive. But if the hurt was intentional, this is more challenging. Yet the fact that the harm was done intentionally means the other person was not happy. The other person was out of balance, not in harmony. Otherwise that person would not have harmed me. He or she was in the middle of some kind of conflict themselves. Happy and balanced people do not go around hurting others. Recognizing the pain in the one who harms begins to open our heart to forgiveness. We start to recognize that the one who harmed was out of control and may well have been hurt by someone else. Thus, his or her harm was in reaction to something painful they received. It was almost like a knee-jerk reaction, without much thought. Conflict begets conflict. In the future, the negative consequences that will come to the one who harmed, simply as a result of the action of bringing harm to another, are quite severe. Just thinking along these lines moistens our heart. It gives us more space, more breathing room. We feel less closed in and less angry. Our sense of retribution lessens. We become more relaxed and calm. Our fear diminishes. Thus, our heart automatically opens. More love and compassion begin to flow. Of course, this is a process and takes time. Repeated practice is needed to break our old habits and open our heart more and more.

A wonderful example of the power of forgiveness is told by His Holiness the Dalai Lama[1]. It is a true story about someone he calls his personal hero. This story brings tears to our eyes. Richard





Moore was 10 years old in 1972 and living in Northern Ireland. A British soldier shot him with rubber bullets, resulting in Richard becoming totally blind. The tragedy could have turned the boy into an angry and resentful man. But Richard never bore ill will. Instead he devoted his life to helping and protecting other vulnerable children around the world. He was intent on finding the man who caused his blindness. When they finally met some time later, Richard told the British soldier that he forgave him. The two men are now friends. This marvelous example of the power of forgiveness is so moving, it often makes us cry.



Barry Kerzin
"Tong Len Meditation"

2:58 min

Patience and Overcoming Anger

Patience is fundamentally the exercise of restraint based on mental discipline. Mostly it restrains our anger. Essentially, patience is the antidote or counterforce to anger. Through reducing and eliminating our anger thereby, compassion naturally flourishes. The Tibetan term is *soe pa*, which is usually translated as patience. But it includes the virtues of tolerance, forbearance and forgiveness. Its deeper meaning is the ability to endure suffering. It implies not giving in to our instinctive urge to reflexively respond in harmful ways due to our pain. But *soe pa* has nothing to do with being passive or impotent. It does not mean lacking the strength or ability to fight back. Nor is it gritting our teeth and enduring injustice grudgingly. Instead, genuine patience requires strength and courage. Strength and mental courage are required to discipline the mind. Mental discipline helps us to restrain harmful ways of living, particularly anger.

Patience interrupts our automatic, knee-jerk reaction of revenge and anger. Mental discipline requires that we adopt a wider, more holistic view. Adopting a wider, panoramic perspective gives us an understanding of the complete situation. This allows us the emotional space to distance our self from the feelings of anger. Having emotional space, we are no longer boxed into an emotional corner. We learn how to not identify with the anger. We can just let the feeling of anger go without clutching onto it as mine. We simply imagine the anger floating away like a cloud drifting naturally across the sky. By not tightly identifying with the anger, we are able to let it go. With this visualization comes a distance and space between our self and our anger. Thus, with this space it becomes easier to separate from it. Therefore, we have more room to relax. We have let go of identifying the anger as “me” or “mine.” Here it is helpful to make a distinction between the person and the action. It allows us to have tolerance and forgiveness towards the person, yet still be opposed to the action. Very harmful actions may need appropriate punishment according to the law. Of course, it is the person who committed those actions that is punished. Yet still we maintain our respect and compassion for the person that caused the harm. We are all human and make mistakes. At the same time, we all have this amazing potential to become better human beings.

In order to overturn anger, it is important to reflect on its disadvantages. This helps us to strengthen our resolve to practice patience. Intense moments of anger create tremendous difficulties for us later on. It deletes our history of wholesome actions. Thus, the beneficial, happy results from doing good are no longer available to us. Anger also has insidious, corrosive effects on our mood and on our present state of happiness. Gradually and steadily repeated anger

undermines our inner peace. It deprives us of our clarity. We lose the panoramic view. Hence, decision making becomes clouded and takes on a narrow scope. Anger hinders our empathic nature, which is the source of our greatest happiness. In fact, it would be fair to say that all the violence and destruction in the world is the result of aggression based in anger and hatred. The damaging consequences of anger and hatred can be seen clearly in domestic violence. These are also the sources of communal violence and war. Anger often arises out of a deeper, inner dissatisfaction. This latent state of a lack of contentment and irritability is called *mi dewa* in Tibetan. It is a general underlying state of unease, setting a tone, or as Dr. Paul Ekman (see also [Box II](#) in this volume) would say, a mood that underlies flares of angry emotion. This discontent makes us more susceptible to triggering destructive emotions, especially anger. Dissatisfaction in our life is the fuel that sparks the fire of destructive emotions such as anger, hostility and hatred. Therefore, just as recognizing sparks before the fire can prevent the fire, similarly recognizing an underlying mood of discontent can control the expression of anger. When we start to see things from this new perspective, we begin to recognize that these destructive emotions feed upon themselves. The more they are indulged, the more they intensify. To address such self-perpetuating destructive emotions, it is helpful to turn our attention inward. We become more familiar with our tendencies and habits. Instead of blaming others and the world, we become more mature and work on ourselves. The great eighth-century Buddhist master Shantideva[2] makes this point exceedingly well when discussing how to manage anger. If we wish to prevent our feet from being pricked by thorns, it would be foolish to try covering the whole world with leather. Rather, it would be much more reasonable to just cover the soles of our feet. In the same way, it is a mistake to think we will get rid of anger by changing everything and everyone around us. Instead it would be much better to change ourselves.

Compassion as a way of life naturally condemns wrong actions and opposes them with all the means necessary, while at the same time, maintaining respect for the person who engaged in the harmful actions. Forgiveness does not mean ignoring or forgetting. Instead, it is a way of dealing with wrongdoing that brings peace of mind. At the same time it prevents us from succumbing to the harmful impulses of revenge. By distinguishing the deed from the person performing the deed and by understanding the situation in its entirety, we come to the conclusion that the person who harmed also deserves our compassion. Severe, painful consequences of his harmful actions await him in the future. Practicing patience and forgiveness is enormously liberating for us. I remember my feelings when hearing the story of the Irish boy, Richard Moore. When we dwell on the harm someone has done to us, we become angry and resentful. Clinging to painful memories and harboring ill will cannot reverse the wrongs done to us. Such an approach does not help. On the contrary. Our peace of mind is disturbed and we do not sleep well. Our immune system weakens and eventually our physical health declines (see also [chapter 13](#) and [chapter 17](#)). We develop more heart problems and suffer more accidents. If, on the other hand, we are able to overcome our feelings of hostility towards those who harm us and forgive them, there is immediate and perceptible benefit. We breathe easier and become more relaxed, with blossoming inner peace and confidence. This is my experience. It feels like a heavy weight has been lifted from my shoulders. My body feels lighter, and the whole world looks brighter. I have the feeling that I can now move on and get on with my life.

Perseverance

Perseverance is not giving up, even in the face of adversity. It is not allowing our tendencies towards laziness and procrastination to control our lives. A new courage that confidently says, “I can do it” is nurtured. With this confidence, comes a new sense of meaning and purpose. It is not just continuing our efforts out of boredom and drudgery. Rather, there is an enthusiasm born from understanding the long-term benefits of not giving up when doing good things. We gain a sense of

conviction in the long-term benefits. Perseverance reduces our lazy tendency of giving up, especially when we are working for the higher purpose of concern for others. What higher purpose could there be than working for the welfare of others? There are two kinds of benefits. There is the benefit that comes to the other and the benefit that comes to us. We feel relaxed and happy, gaining a new sense of meaning in our lives. This brings more fulfillment, satisfaction and contentment. Money cannot buy these things. When I persevere in the face of obstacles and finally complete the wholesome task at hand, I feel very satisfied, regardless of the outcome. There is a sense of achievement and long-term meaning. Doing wholesome things makes me feel wholesome and good inside.

Concentration

In order to practice generosity, forgiveness, patience and perseverance successfully, we need a focused, non-distracted mind. Focused attention or concentration breaks the habit of distraction. Additionally it brings more clarity and brightness to the mind. It interrupts rumination. It interrupts multi-tasking. It interrupts that incessant internal chatter, thereby allowing us to channel our energies in a healthy direction. In this way, the mind and heart become more stable and clear. Thus, the mind and heart become more powerful like a laser. In this way, utilizing this laser-like mind, decisions become clearer and more effective. The mind gains a wider perspective through concentration. Potential distractions are shut out. The situation at hand becomes crystal clear as there are no distractions to cloud the mind. Hence, the mind is more relaxed. We become calmer, as there is less clutter. The mind no longer jumps around like a monkey. This creates a spaciousness and openness in the mind and heart. Within this open space, there is distance from unwanted thoughts and emotions. We are more able to separate from these thoughts and emotions. Thus, we have more freedom of choice to engage or not engage with these thoughts and emotions. The mind and heart can investigate multiple scenarios efficiently, moving smoothly and with ease. Thus, decision-making has more breadth and more effectiveness powered by efficiency. When my mind is concentrated, I feel very alert and relaxed and am able to see things from a broad perspective. Making decisions becomes easy. There is no anxiety or fear. I seem to have greater vision. I feel more at peace. There is balance between alertness and relaxation.

The cultivation of concentration is a process [see [Box VII](#)]. I have not achieved the full degree of concentration, yet when my mind is concentrated, I feel totally absorbed. Time is absent. When I arise from a concentrated, meditation I am surprised by how much time has passed. It seemed like five minutes, yet the clock says one hour. My body feels very light and I feel as if I do not need to sleep. Of course, later I get tired and sleep. My sleep is deep and undisturbed. There is a feeling of peace and deep relaxation. When I remember the Buddhist wisdom, my mind goes deeper.

Alternate methods of cultivating compassion like generosity, forgiveness, patience and concentration become powerful tools even when we are practicing compassion directly. They moisten the heart and reduce our pride, anger, jealousy and selfishness. Many avenues lead to the same result. Walking them all strengthens our altruism and makes us happier.

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Video Segment

Non-Violent Communication

Regula
Langemann

Suna
Yamaner

NVC is a communication and conflict resolution model

NVC focuses on language as a tool to seek, be and live connected to oneself and the world

It could be called language-based compassion training





Sound Collage

2:38 min

When I am Angry...

Nathalie
Singer

Chapter 5

Working with Emotions in the Cultivation of Compassion

Practical Tools for Teachers

Opening the heart can at first create anger, fear and sadness, as well as joy

Poems, stories and daily life examples help moisten the heart

Growing love grows itself

Erika L.
Rosenberg



Margaret
Cullen



Working with Emotions in the Cultivation of Compassion

In this chapter we share our experience as teachers in helping people with the emotional challenges that occur during the training of compassion. We will use the lens of our shared experience teaching the Compassion Cultivation Training (CCT see [Box IV](#)) program of Stanford University's Center for Compassion and Altruism Research and Education (CCARE).

As teachers, our backgrounds inform our approaches to the training of compassion. *Erika Rosenberg* occupies a unique niche at the interface of science and practice as a teacher/practitioner of meditation and a scientist who studies how meditation impacts one's emotional life. *Margaret Cullen* initially joined the team at CCARE to help with curriculum development, having met Thubten Jinpa through the Mind and Life Institute. She is currently a senior instructor at CCARE and is involved in the training and supervision of students learning how to teach CCT.

The Emotional Challenges of Growing Compassion

To grow compassion one must meet suffering directly and commit to being moved by it enough to liberate oneself and others. This process can be very emotional, potentially involving a myriad of feelings such as sadness, joy, grief and love (to name but a few). Teachers can facilitate, attend to and make use of these affective changes to encourage the growth of compassion.

We aim to show how emotions are part and parcel of compassion training and describe a few specific cases among the infinite variety of emotions that can arise in this inner work. Our main goal is to examine *how* and to *what* end one might work with emotions in the training of compassion. In so doing, we will share techniques from our experience as teachers; specifically, we will share some actual practices and other tools from teaching CCT ([Practices and Tools from the CCT Curriculum](#)).

Which Emotions Occur in the Cultivation of Compassion?

There are dangers of becoming too formulaic in describing the kinds of emotions that occur in compassion cultivation. Still, some predictable things happen when people are invited to cultivate an engaged concern for others' welfare. We discuss a few examples.

Fear. Many compassion meditations involve conjuring the mental image of a "target person" (be it a loved one, stranger or foe) who may be suffering. We ask our students to imagine a person they know who is suffering, to try to notice what it feels like to see this person suffering. When people begin to contemplate the other person's suffering, they often pull back. This is a natural, defensive response. The root of this withdrawal is the fear of touching another's discomfort, perhaps based on fear of contagion (see also more about fear of compassion [chapter 3](#)). Helping students to be spacious and patient enough to remain present with that urge to withdraw is key to the progression of the training. One must be able to let go of the fear – or at least make room for it to gradually dissipate on its own – before one can move ahead to potentially help another. People who have not learned how to be spacious in this regard will encounter difficulty when they try active compassion practices like *Tonglen*, which requires opening your heart to another's suffering for the





purpose of transforming it.



Erika L. Rosenberg
“Tonglen”

25:23 min

If it seems toxic to breathe in another’s pain, then the fear of being with suffering has not been adequately addressed. Only when this fear is met with ease can the growth continue.

How do we address fear? Part of this can happen foundationally, in helping set up the optimal conditions for compassion cultivation. From the CCT perspective (see [box IV](#)), key to this is basic contemplative training in learning how to stabilize the mind and focus attention. This foundation helps the person see his or her own reactions more objectively, to see such emotions arise, and to be mindful of the urge to flee.

Also key to working with fear and other “scary” emotions is self-compassion, which is another part of CCT training ([chapter 16](#) and [box I](#) for more details about self-compassion). If one has practiced being gentle on oneself and meeting one’s own basic needs for comfort and peace, then letting go of sources of suffering (such as fear) is easier to do. We teach that emotions are brief, evanescent experiences. If you let them run their natural course, the arousal will subside. Then you can move along.

Sadness. The suffering of others – loved ones or strangers – is disheartening. We may experience dismay at their hardships, wishing for the return of a state of wellness. If the target of our practice is someone dear, then we may experience sadness over our own loss – of the person our loved one used to be or what he or she used to be able to do. Sadness has a great pull, and we have to be mindful of getting caught in its torrents. Once again, insight, spaciousness and self-care are key. The most important lesson – we think – is learning how to interpret an acute feeling of sadness as indicative of what that person means to you, and letting the immediate surge of emotion dissipate on its own.

Grief. Grief might be described as a combination of sadness and pain[1]. When coming into emotional resonance with another’s condition we might quite literally feel pained at their suffering. The techniques for dealing with grief are similar to those for dealing with fear and sadness – spaciousness, insight and self-compassion. As with sadness and fear, there is also an educational component in CCT that helps participants distinguish between genuine compassion and what are known as its “near enemies”, typically understood to be grief and pity[2]. The experience of grief is often a result of feeling overwhelmed by the suffering. In this case, we encourage participants to see if they have slipped from feelings of compassion for the other person into feelings of grief at their own inability to “handle” the suffering. This feeling of overwhelm can quickly escalate into a story about all the suffering in the world and the impossibility of attending to it all. Here we see, as whenever there is a near enemy, that we have shifted into a story about ourselves, rather than maintaining concern for the object of compassion.

Anger. It is not uncommon for anger to arise when bringing to mind people we care about, as our most intimate relationships often carry with them a history of conflict as well as love, not all of it

resolved. Rather than attempt to analytically work through the feelings of anger, we encourage participants to experience the feelings of anger in their bodies – to notice the experiential changes that occur naturally – and then to see if they can refocus on that which is lovable in the person. This does not involve denial of the conflict, it is, rather, exerting the choice to focus for the moment on feelings of love and concern. If this is not possible, it is often advisable to find an easier “target” and move back to this person at a later time.

Another option when dealing with difficult emotions such as fear, sadness, anger or grief is that we can begin to really attend to the sensations in the body rather than the story of people and places that elicited them. Sometimes, when we just sit with those feelings, we can experience them more as energetic changes in the body, ones with limitless possibilities for transformation. When people start working with active compassion practices such as Tonglen, they learn how to transform emotional energy into a compassionate motivation to heal.

Love. For all the emotional difficulties in compassion cultivation, there are boundless benefits. Many of those involve the expansive quality of the love one can grow for others – the warm glow and energy of sharing. Feelings previously reserved for one’s inner circle emanate outward, and once one realizes the potential for growth and sharing with others, the process becomes reinforcing – growing love grows itself. It just feels good! This is to be celebrated and to be used for one’s own and others’ well-being. So what is the task here for the teacher? For one, it is to help the student notice the beginning of these feelings when they first appear, and to sit with the subtleties of the feelings, so as to better be acquainted with them when they arise next time. This is important, as these pleasant feelings may be dominated early in compassion training by the less pleasant feelings of emotions such as sadness and fear. Students must also be cautioned against having expectations for these glorious feelings always to arise. If one practices compassion only to experience these pleasant feelings, the compassion will necessarily be limited.

The task is to experience all of it: both to appreciate the rich texture of our connectedness to others and also to learn from these varied emotional responses. Emotions are very clear indicators of what is important to us[3], [4]. Feeling fear? Then you may have found something threatening. Feeling sad? Then perhaps you experienced a kind of loss. Emotions are full of information, and we can bring that right into our practice.

General Strategies for Working with Emotions in Compassion Training

Compassion is a natural response of the open heart, yet over the course of development we learn defensive strategies for closing down the heart. Our goal in compassion teaching is to bring people back into contact with that natural capacity to care and to build on that with the growth of a more inclusive circle of compassion.

Moistening the Heart. An early strategy in our efforts to train compassion is to make the heart more receptive to others, to enable a dry, blocked or closed heart to soften and open, becoming more responsive not only to one’s own condition, but to the full predicament of others.

We employ many tools in CCT to make people more receptive to compassion: traditional meditations, poetry, stories and videos. Indeed, we have found that the less traditional tools are often the best ones. Consider, for example, a wonderful story about empathic helping from the NY Times by Justin Horner ([NY Times](#)). This piece never fails to move us as teachers reading it to the group (in spite of having read it dozens of times already, Erika cries each time she finishes sharing it!)





Stories have an ability to move us, to mobilize the body and mind towards certain situations and sentiments. In CCT we often use stories or poems to mobilize the students this way, which makes them more responsive to meditations. The ground is fertile, so to speak.



Justin Horner read by Erika L. Rosenberg
“The Tire Iron and the Tamale”

4:53 min

A more traditional approach to softening the heart works directly with meditative exercises, by manipulating targets of practice to optimize the easy flow of love and/or concern. For this reason, we often work with loved ones first, as they are considered “easy targets” for love and compassion.* The function of such approaches in teaching – and this goes back to the ancient teachers – is to make use of easy connections to bring the student into his or her own body to notice what it feels like to love, to have love be sent from one’s own heart to another, to be witness to another’s condition, be it suffering or not. This is a form of priming the compassionate connection. The logic here is thus: if we can get it going easily, then we can extend it towards less familiar targets. This is a time-tested, well-established method for priming the compassionate response.

Developing Emotional Literacy. As we have discussed, when one comes into contact with suffering, various emotions may emerge, everything from sorrow to joy. The type and intensity of emotion varies with person and situation, but these emotions can be important indicators of how we view ourselves and others in relation to difficulty and pain. Using tools of noticing, naming, acknowledging and enhancing the feeling of emotions in the body (see [chapter 8](#)), we help people develop *emotional literacy* of the affective terrain around what might emerge in compassion cultivation. This includes recognizing the signs of a closed heart, inviting emotions to surface, as well as seeing the near enemies that masquerade as compassion (see [chapter 9](#)). Returning to these sensations again and again – as a practice – makes people more at ease with them when they arise in spontaneous interaction.

Some Practical Tools for Compassion Cultivation

At the end of the chapter we share a few practical tools that have been helpful to us in training compassion in our teaching. Any of these poems, essays or videos can be used for moistening the heart – to move people – to help them engage empathically with the others and embrace common humanity. We find that exposure to these kinds of materials enhances receptivity to more formal meditation practices. Our toolkit is ever-changing, depending on what new items we encounter in the news or arts. We present some of them [here](#) in hopes they will be useful to teachers and students alike. More details on the CCT program specifically can be found in the chapter by Thubten Jinpa and Leah Weiss-Ekstrom in this book (see [Box IV](#)).

Although we see emotions as crucial to the development of compassion, not every compassionate act need involve an emotional response. Our friend and colleague, Paul Ekman, once posed this question (paraphrased here) to His Holiness the Dalai Lama: “What if I write a large check to give to the people in Haiti, for example, and at the moment I write it I feel nothing? Is it still a compassionate act? Must I feel something for it to be compassion?” (Paul Ekman, Stanford

University, October 15, 2010). This example raises the question of whether emotion is a necessary condition of compassion (see also [chapter 18](#)). Perhaps, perhaps not. We do not know. It may be that with long-term practice, compassion may become so ingrained that it is effortless and automatic.

Nevertheless, *training* people to access compassion is a developmental process that can bring forth many emotions. Such teaching might best be viewed as a facilitative process – we offer people tools and techniques to help them access something that they already possess deep inside. It is a tricky business to open hearts, as love and compassion may be very well protected by life experiences or habitual patterns of behavior. We hope our suggestions are helpful to others who undertake this privileged work, and we wish them, their students and all the people with whom they come into contact much happiness and ease.

* In fact, in CCT we use loved ones as a target before the self (whereas traditional practices start with the self and move outward from there), given the trouble Western students have with self-compassion. Priming the heart with an easy target seems to facilitate the move towards self-compassion with less complication.

Table 1:

Resources for the Working with Emotion in Compassion Cultivation.

| Useful for: | Title: |
|--|---|
| moistening the heart; empathy; common humanity | “The Tire Iron and the Tamale” (http://www.nytimes.com/2011/03/06/magazine/06lives-t.html) |
| | “Wandering around an Albuquerque Airport Terminal” (http://april-is.tumblr.com/post/5069291899/april-30-2011-wandering-around-an-albuquerque-airport) |
| moistening the heart; common humanity | “At the Corner Store,” Poem by Alison Luterman |
| | “Kindness,” Poem by Naomi Shihab Nye |
| gratitude | “Moving Art” (http://www.youtube.com/watch?v=nj2ofrX7jAk) |
| cooperation; similarity of all creatures | “Polar Bear plays with Huskie” (http://www.youtube.com/watch?v=iHj82otCi7U) |
| living together; similarity of all creatures | “Elephant and Dog Friendship” (http://www.youtube.com/watch?v=cBtFTF2ii7U) |
| kindness, helping; common humanity | “Special Glasses” (http://www.youtube.com/watch?v=LfeXxkbgCVE) |
| maternal love; unconditional love | “Maternal Instinct Cross-species” (http://www.youtube.com/watch?v=nK5uPBF-s5Y) |
| helping; caregiving; love; gratitude | “Monkey Helper” (http://andrewsullivan.thedailybeast.com/2012/05/how-have-i-lived-so-long-without-a-monkey.html) |

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Chapter 6

Being with Dying

Experiences in End-of-Life-Care

To care for the dying needs compassion for the patient and the self

Be aware of pathological altruism and other "edge states"

Caretakers should not be attached to outcomes

Joan
Halifax



Being with Dying

"I'm up late admitting patients to the inpatient hospice unit. Just when I think I'm too old for these late nights without sleep, a person in all their rawness, vulnerability and pain lays before me and as my hands explore the deep wounds in her chest and my ears open to her words, my heart cracks open once again.... and this night a sweet 36 year old woman with her wildly catastrophic breast cancer speaks of her acceptance and her hope for her children, and she speaks with such authenticity and authority. And her acceptance comes to me as the deepest humility a person can experience and then again, once again, I remember why I stay up these late nights and put myself in the company of the dying."

(Gary Pasternak, MD, Associate Faculty: Being with Dying)



Gary Pasternak read by Joan Halifax
"Being with Dying"

1:23 min

These are the words of a palliative care physician who was trained in Upaya's professional training program in compassionate end-of-life care. Dr. Pasternak joined our faculty, and is now the director of a hospice in northern California. Dr. Pasternak's words reflect the inner qualities that make for a great physician. He exemplifies what we endeavor to cultivate in clinicians, this heart of compassion and deep humility, courage, and respect. As Dr. Pasternak was an early trainee in our BWD clinician training program, he taught us much about what will serve doctors and nurses who are daily faced with patient, family, and institutional challenges. He, like so many others in our program, also communicated what our core faculty knew, that this work with dying people touches the deepest values that we have as human beings and can lead us back to ourselves in the right circumstances.

I had long known this, because this world of caregiving had opened for me in the process of my grandmother's tragic illness and death. I also knew this from my anthropological work in Africa and the Americas. As an anthropologist and student of religion, I had looked deeply into the world's religions exploring teachings related to compassion, dying and death that could serve those who were facing death in the contemporary world and those caring for the dying. As well, I was fortunate to have received teachings and engaged in practices from the *Theravada*, *Mahayana* and *Vajrayana* schools of Buddhism. I learned that all three schools of Buddhism could contribute greatly to the understanding of how to train clinicians and caregivers in compassionate care of the aged, the dying, and those suffering from catastrophic illness. I also learned that other cultures often care for their dying in ways that were more compassionate and realistic than ours.

I began my direct work of compassionate care of the dying in 1970 as a medical anthropologist at the University of Miami School of Medicine's Dade County Hospital in Miami, Florida. While working in this big county hospital, I saw that the most marginalized group of people in the hospital system were those who were dying. As someone involved with curriculum development at the

medical school, I endeavored to introduce the concept of compassionate care of the dying into this institution's curriculum, recognizing the stress experienced by clinicians and dying people in relating to existential and psycho-spiritual issues of mortality.

In 1972, I collaborated with psychiatrist Stanislav Grof and a project using LSD as an adjunct to psychotherapy under the auspice of the National Institute of Mental Health. The Buddhist perspective on impermanence was profoundly relevant to those facing death; as well the Buddhist vision of compassion became a base note in our work in this contemporary rite of passage.

Over the years, I learned of a number of programs using different teaching methods to aid health care professionals in the knowledge and skills to care for dying people. Despite the development of these curricula, which are often behaviorally based, health care professionals frequently report a lack of skills in psychosocial and spiritual care of dying people and report suffering from "compassion deficit." They also report difficulties in caring for the dying, with significant levels of pathological altruism, vital exhaustion, secondary trauma, moral distress, unresolved grief, and other psycho-social and existential ills. In addition, there are increasing reports of "patient dissatisfaction" and patients reporting that clinicians lack empathy and compassion.



Over the decades of working in the field, I have identified six "edge states" or challenges that clinicians can be subject to. Each of these conditions has within them positive potentials. At the same time, they can be pernicious experiences, and can cause clinicians to leave medicine and nursing. These states are: 1) pathological altruism – an excess of altruism that mentally or physically harms the experienter; 2) burnout or vital exhaustion - cumulative work demands and stress; 3) secondary trauma - dysfunction that arises from prolonged exposure to the suffering of others; 4) moral distress – moral conflicts when the clinician knows what is right to do but cannot do it; 5) horizontal and vertical hostility – behaviors of disrespect and bullying among members of a peer group or disrespect of those deemed lower in "rank"; 5) structural violence - violence in the system that marginalizes or harms individuals or groups.

To address these complex concerns and the profound need for compassion in caring for the dying, in 1996 I created a curriculum to train professional caregivers in compassionate care of the dying: "Being With Dying: Professional Training Program in Compassionate End-of-Life Care" (BWD). In addition, I have developed a typology for compassion, a compassion model, and compassion intervention discussed in another chapter of this book. The model and G.R.A.C.E. intervention have become the spine of our BWD training, and is now as well used in other training programs to teach clinicians compassion.

In exploring with professional caregivers what they feel is important in a compassion-based

interaction with their patients, a number of features have been articulated, in addition to the model. These aspects are outlined by educator Mark Greenberg in relation to teachers in engendering mindfulness and compassion in the classroom. They translate well for clinicians in fostering CMC (contemplative mindful compassion-based) care. In the following part, I am going to introduce different features by telling personal stories to exemplify the practical meaning of these aspects:

Listening with Full Attention:

- Correctly discerning patient's behavioral cues
- Accurately perceiving patient's verbal communication
- Reduced use and influence of cognitive constructions and expectations

Story: I attended an elderly student, who had suffered a massive heart attack and was taken to the emergency room near our Zen center. Hooked up to IVs, in the hush of a private space in the ER, she began to realize that she might be near death. As technicians stirred around her, she settled down into a quiet, open, and fearless state. She had been a child in Berlin during World War II and had vowed then to face death openly and with dignity. Those of us who sat with her in the ER, listened in a respectful way to her concerns and also her courage. We could see the effect of her practice and her training. We also felt the ballast of our training in care of the dying, as we sat with her through this crisis and gave our full and calm attention to her and to those who were attending her.

A few years later, my student was diagnosed with a fast-growing cancer. She died six days after receiving the final diagnosis, and again her quiet presence and acceptance astounded those of us who cared for her. We sat with her, listened, sat in attentive and compassionate silence when she lost her words. When she was told that nothing more could be done to help her, she simply dipped below the horizon and let go into the deep trough of peace. She went quickly, gracefully, her equanimity standing her in good stead. All of us who attended her had been through the BWD training. We were able to accept the truth of her situation, and at the same time, have a kind of compassionate optimism that that was not about her survival but the quality of life that we observed in our dying patient. We had the training to listen and to support her in silence. Her death was characterized by profound peace.

Nonjudgmental Acceptance of Self and Patient:

- Healthy balance between patient-oriented, clinician-oriented, and relationship-oriented goals
- Sense of care-giving efficacy
- Appreciation of patient's traits
- Reduction in self-directed concerns
- Fewer unrealistic expectations of patient

Story: Issan founded the Hartford Street Zen Center and the Maitri AIDS Hospice in the gay district of San Francisco. He had not been diagnosed as HIV-positive himself, but believed it was crucial to offer help to his brothers dying all around him. Issan was a Buddhist who was deeply intimate with compassion. Through Issan's work with dying people, I saw how Buddhism could function in a practical way for a community in crisis, a community that flourishes with compassion. At the





hospice you didn't feel piety. The practice there had been energized by the dross of suffering—not consumed by it.

Some years after the founding of the hospice, Issan was diagnosed with AIDS. We hoped he would live a long time, but as it turned out, he had only a few short years left inside him. As Issan's health was declining, I came up from Southern California to visit him in the hospital. Although I have been at the bedside of many dying people, watching Issan die was not easy for me. He had been there for so many. He was a good friend and a role model. His life taught us all what it meant to be a true human being, present for another in such a way that any sense of "other" disappeared. Sometimes that disappearing was in laughter; sometimes it was in silence. Sometimes he looked with his eyes right into the heart of the matter.

Like so many others, I wanted my friend to continue to live. Thin and fragile, wrapped in a hospital gown, Issan was sitting up in bed in the late afternoon when I went to visit him, maybe a month before he died. I sat on the side of his bed, and suddenly my face was wet with tears. Issan reached over to touch my hand. He looked at me and said, "It is not necessary." Here the patient was not judging himself or me, nor in the end, did I judge him. I had profound appreciation for Issan's courage and humor, wisdom and love. The feeling between us was not characterized by judgment but by respect and love, and by a deep sense of the reality of impermanence.

Emotional Awareness of Self and Patient:

- Responsiveness to patient's needs and emotions
- Greater accuracy in responsibility attributions
- Less dismissing of patient's or other caregivers' emotions
- Less withdrawal/abandonment resulting from negative emotions (e.g., anger, disappointment, shame, grief)

Story: The following is a letter from his physician, who was a participant in our professional training program for clinicians: "As with everything he did in his life, Steven went out fighting. By the last day, he required continuous oxygen. When his breathing became terribly labored (and long after he had become unresponsive), we turned off the oxygen. I fully expected him to pass in minutes. No, not Steven. Never the easy way out. He still labored, minutes turning into hours. Family and friends started reading poetry—Blake, Wordsworth—preparing for a night that seemed to have no end. At one point, I thought of co-meditation, but couldn't imagine how I could do that. Too late now, I thought. Then, without any idea what I was doing, and with still no end in his agony in immediate sight, I began speaking into his ear, my forehead almost resting on his, my hand slowly rubbing his chest in soft circles, as I whispered to him to relax, to slow the breath down, to be easy. Within minutes his breathing pattern slowed, the labored quality going. A few minutes later, when it had slowed even more, the end clearly near, I called someone else over to take my place by his side, and with her now whispering in his ear, he died quietly, peacefully. A long, hard labor over. The night complete. A man reborn into another world."

This good doctor had such resonance with his patient, and such devotion. I know him well. His life was changed as a result of what he gave to his patient and what he learned from him.

Self-Regulation in the Caregiving Relationship:

- Emotion regulation in the caregiving context

- Caregiving in accordance with goals and values
- Less over-reactive/“automatic” reactions or withdrawal
- Less dependence on other’s emotions

Story: I spent several years traveling back and forth to Seattle from Southern California to be with John and Kenny, both of whom had AIDS. John died first, and all our loving of him, all our holding of him, all the support offered to him, the listening, the presence, seemed to do little good; and yet, one doesn’t look for an outcome.

At the end, when John was actively dying, he could not believe he was actually going to die. Eventually he developed dementia. John died a hard death. I learned that sometimes all we can do is just be present. We are powerless to change the tide of suffering, dying, and death. And we, as caregivers, have to take care of ourselves along the way.

After his partner’s death, Kenny moved to a tiny room in a brownstone in the Bronx. Whenever I went to New York, I’d go to see him. Sitting by his bed, I would listen to his quiet request that I help him die. I could understand why Kenny wanted to take his life. It seemed to him that he had little to live for. He was alone most of the time in a tiny sweltering room in a desolate corner of New York, with few visitors and little support. He had been abandoned by most of his friends. I knew from years in this work that withdrawing from one’s patients is not an uncommon experience. I did not want to do this.

I invited Kenny to move in with me, but he declined, saying he wanted to stay on the East Coast near his sister. In the end, I had very little to give Kenny except for presence. We meditated together, and we shared moments of deep peace. Then one evening Kenny said to me, “You know, it’s October now. In November I’m going to my sister’s farm and put myself on the earth and die.”



And that is exactly what he did. He chose the time of his death, and he took his own life. He took it peacefully, close to what he loved the most, the land he had tended since he was a child. I heard from those who were with him that it took him a long time for him to die, but that he was right there through all of it. As a good friend and caregiver, I found it challenging to support his decision. And yet, it was necessary to support his wish and autonomy, and I had to regulate my response to his situation, including his choice to take his own life, in order to keep on showing up for him.





Compassion for Self and Patient:

- Affection in caregiver/patient and colleague relationships
- More forgiving view of own caregiving efforts
- Less compromised affect displayed in the caregiving relationship
- Less self-blame when caregiving goals are not met

Story: An older woman asked that we support her as she was dying of a rare neurological disorder. After some months, she disclosed that she did not want to continue living with her rapidly decreasing capacities and her increasing pain. Over many months, we gently and firmly tried to find ways to offer her greater love and support. But she was determined to end her life.

She tried more than once to end her life, but did not succeed. Each time she swallowed the pills, her partner would call 911 and a rescue team would arrive and resuscitate her. Her anger at these rescues went deep, as she had been in a psychiatric institution as a young woman and felt profoundly angry that others were controlling her destiny. It was not a matter of love and reason being an intervention to end this cycle of misery. All the spiritual and practical issues meant nothing to her in the face of her history and her current suffering.

Our team reluctantly told her that we could not support her suicide, although we loved and respected her. We were legally bound to “call for help.” She and her partner agreed to not inform us or anyone if she attempted suicide again, and in this way, they would let things take their course. Knowing these two women, I imagine this was a hard decision; nor was ours an easy one either. It was a process of being realistic and blameless.

One Wednesday morning, the phone rang. Our friend had attempted suicide. This time she was comatose and had entered a vegetative state. When her partner called me, she had been that way for four days. I immediately drove to her house to find her unconscious and completely chaotic, her breathing ragged, her body tossing about like flotsam in stormy waves. The hospice nurse and my assistant, who knew her well, asked that I spend some time alone with her. “She would want this,” they said. I sat down beside the bed and took her hands in mine. Her eyes were blank, her body twisting and sweating profusely. I began breathing with her, telling her that she was loved and that it was OK for her to let go. We breathed together, and gradually, almost imperceptibly, with me quietly saying “yes” on her out-breath, her breathing slowed and became lighter and lighter, until at last she slipped away and was gone. Maybe this story illustrates what it means to do this work. Compassion is always the base, including compassion for one’s own limitations in the work.

This is the essence of CMC care, the ability to offer equanimity, compassion, mindfulness, and information in a balanced way, where there is understanding and appreciation all around. Here is another story that illustrates what we try to bring to those near death.

Story: This is a short account of Matthew who had been diagnosed with a brain tumor. When Matthew finally died of his cancer, he had already discussed his final wishes with his family and with me. This is a really important part of what we do as compassionate caregivers: to create an atmosphere of trust, courage, and compassion, where difficult subjects can be explored. In a family meeting with Matthew, we had sat in council and the question came up of how he wanted his body treated immediately after he died. I had shared with Matthew and his family how we recommend that the body is cared for after death. He seemed to find this guidance helpful and made the request of his friends and family that this happen. Creating a situation of trust and ease in the midst of the drama around dying is really important. From this base, there can be greater balance and

discernment, two features that are related to compassion.

I was not there the moment Matthew died. When I arrived to help, twenty minutes after he had passed, I found a calm and very moving scene of loving care taking place. His partner was gently swabbing his mouth clean of mucus; his twin sister was holding his hand and thanking her brother for all she had learned from him. His closest friend and the hospice nurse, their arms around each other, softly prayed for him. No one was rushing around, lost in busyness and trying to avoid what had just happened. We were, in a very quiet and connected way, being with dying, and being with dying from a base of compassion.

To support CMC care, clinicians and caregivers need to: value well-being, insight, compassion, and self-respect; recognize challenges and stress; commit to physical, emotional, mental, spiritual, relational balance; and engage in strategies supporting “best practices” with CMC care toward the dying, community, colleagues, self, as a base. There are so many stories of why a CMC in the end-of-life care field is important. To complete this chapter, I offer one more.

Story: A final story to illustrate the how compassion forms a base for care of the dying: When Mary, who had lymphoma, came to see me, I was moved by her appearance. Because of chemotherapy, she had no hair, no eyebrows, no eyelashes. Flaring from her neck were huge tumors. Although her friends had told me Mary was in denial, I found her denial curiously radiant. In our first interview, she leaned toward me and said, “I am not going to die.” At that instant, I felt she spoke the truth.

When we cut through the illusion of ourselves as solid and separate entities, we may well come to the conclusion that nobody dies. One day, Mary’s network of friends, about twenty-five women in all, came together. We sat in council and I asked the simple question: “What are you feeling?” They responded with suffering and frustration. I could not blame this circle of good-hearted women. Something was definitely not working for them. For one thing it bothered them all that Mary was “in denial.” On another level, they had not quite got themselves organized, they felt demoralized, and their care of their friend was erratic. They seemed to be in a world apart from her, and at the same time they loved her and wanted to do their best for her as she was dying.

We listened deeply to each other and explored the question of denial and how Mary’s refusal to accept the imminence of her death could on some level be a reflection of her insight into deathlessness. I shared with them that this was a possibility that might free them to accept Mary’s attitude of denial. Mary’s friends could not ignore their shared fears and frustrations, once they were spoken aloud. When they heard one another, they shifted to a position of compassion for themselves, as well as a greater understanding of their friend’s perspective on dying. We then set out to do the most practical thing, which was to make a schedule.

Over the ensuing weeks, it seemed as though everything went much more smoothly. People showed up at Mary’s on time and worked with accepting her just as she was. I also was part of the schedule, and had the joy of sitting with her several times a week. She and I listened to music, sat in silence, and occasionally talked about simple spiritual issues.

Mary stayed in “denial” up until the moment of her death, when she died peacefully. Her last words were “I am not dying.”

It’s easy to consider denial as some kind of pathology. However, in being with dying, we simply do not know when it might be serving a positive or healing function. “The difficulty,” said philosopher Ludwig Wittgenstein, “is to realize the groundlessness of our believing.” This is truly not knowing.

Deep down inside we are all aware that we are going to die. If we activate the spirit of hope or wisdom through denial, as Mary did, that is our own business. In some situations, it can be of great help and bring peace into our lives. In Mary's case, perhaps what we were calling "denial" was her knowledge that some part of her would never die. I did not know then, and now years later, I still cannot draw a conclusion. I only knew that my own practice and training had given me the grounding and openness to hold this woman's life and death with respect and awe.

PART 2

Concepts of Compassion



PART 2

Concepts of Compassion

7

The Flow of Life – An Evolutionary Model of Compassion

Paul Gilbert

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Chapter 7

The Flow of Life

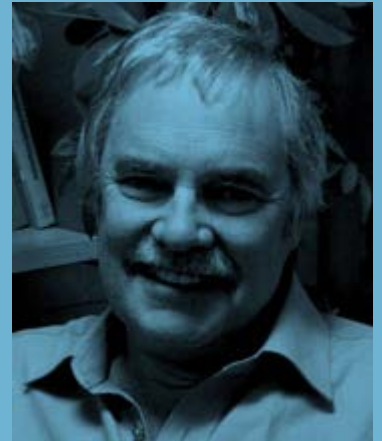
An Evolutionary Model of Compassion

We are part of an evolved design which is responsible for a flexible brain that can sculpture itself to fit particular social contexts

Compassion is rooted in our caring system

Evolved brains can create and block compassion

Paul
Gilbert



The Flow of Life

Understanding the Challenge

Compassion is typically understood as ‘a sensitivity to suffering in ourselves and others with desires to alleviate and prevent it’ (see also [chapter 8](#) and [chapter 9](#) in this volume). This suggests two different types of psychology. First, is the ability to turn towards suffering, to notice it, to be emotionally connected with it and make sense of it without being overwhelmed. The second psychology relates to the wisdom to know how to hold, alleviate and prevent suffering[1], [2], [3] (see also [chapter 15](#) in this volume). At the core of any effort for alleviation and prevention of suffering is the understanding of *sources/causes* of suffering has no one cause and a range of biological, psychological, social/cultural and historical factors interact in the emergence of suffering and the conditions that give rise to suffering.

Evolutionary psychology has its own unique insights into the sources/causes of suffering. One is that we are all to some extent ‘vehicles for genes.’ We are created from the combination of parental genes, born to flourish for a while, reproduce leaving our genes to build a new ‘vehicles’ and then decay and die. In that short-lived journey, fraught with challenges, difficulties and diseases, evolution has built into us a whole range of life-task pursuits to support our survival and those of our kin. We need to spot dangers and take defensive actions; we need to seek out things that are conducive to survival such as food and comfort, sexual partners and alliances. These life tasks and motives are facilitated by different emotions that wax and wane over our life's journey such as anxiety, fear, paranoia, anger, lust as well as joy, love and compassion.

Not only have our brains been created to pursue certain tasks and to experience certain kinds of emotion and passions, but we have a very flexible brain that can sculpture itself to fit particular social contexts and niches. The social context in which we grow up even affects our genetic expression[4] and the neurophysiological maturation of our brains and bodies[5]. We know that people from loving, caring environments are likely to be more compassionate than those who come from neglectful or hostile environments[6]. An example I sometimes use with my patients is that if I had been kidnapped as a three-day-old baby into a violent drug gang then the current version of Paul Gilbert would not exist. I would probably be violent myself, might even have tortured people or be dead or in prison - because for a high percentage of young males born into these environments, this is their destiny. It gives us cause for thought as to what we mean when we have the feelings of a self with ‘these’ values and a sense of ‘being a certain kind of person’ when so many other versions of us are possible – as creations of genes and social context? Compassion begins with understanding just how arbitrary our self-construction actually is[7] (see also [chapter 9](#) in this volume). So many of us are caught up in the dramas of life (be it mental illnesses, diseases, poverty or the wars of one's tribe) and sense of self that we might never choose and yet find ourselves trapped within. Compassion begins with recognising this tragedy at the heart of humanity -that we have all just found ourselves here, with a kind of self conscious awareness, and sense of self whose content is of being caught up in the dramas of evolution. Mostly we have so little control of or insight into this reality that we simply live and die according to our genetic and social contextual scripts.

Gaining this insight is key to a therapy called Compassion Focused Therapy (CFT[8]) because so many people carry a deep sense that they suffer because of things *wrong within them*; because they can't think the right way; can't control their temper, fear, or their eating; they're not mindful





enough; they've done bad things in the past, and so they carry a deep sense of personal shame or feeling of 'basic unlovability'. As one patient said "I always felt that when God made me he'd run out of the nice bits." It is very moving when people begin to see the unchosen nature of so much of what goes on in our minds, soften around the self-blaming and self-hating and realise that in reality our potentials for anger, rage, anxiety, fear, paranoia, depression, delusions, are not our fault at all but are part of brain evolution and social shaping. This insight sets us free from personal blaming but also places a huge responsibility on our shoulders because we are the only species that can have this insight, that can wake up to this mind, in this physical reality, and start to make genuine choices about what kind of self we want to become and bring into the world. While we have many dark potentials, we also have the potential for deep compassion and for creating a more joyous experience of our reality when we are open to compassion toward ourselves and others (see [chapter 16](#) in this volume).

The Evolutionary Approach

The evolutionary approach looks into the nature of the flow of life, from the emergence of the first single cell organisms, with their need for membranes that sets up the sense of physical separateness from their environment (the beginning of 'the separate self'), through to complicated organisms, like early trilobites and fish and on to mammals and eventually humans. Although it is sometimes said that feelings of being a separate self are an illusion, without a separate physical self there is no biological form, there can be no evolution and no evolution of mind as such. Evolution is a process of change via adaptation according to the impact of challenges that exists upon individuals. What has gone before, effects what can come later. So species like ours emerge from per-existing ones (we had a common ancestor with chimpanzees about 6 million years ago) and carry forward basic features for physical bodies and minds with emotions and motives.

The Evolution of Basic Designs

Once we place ourselves within the flow of life, we can see that our minds and bodies have the forms and shapes they do because of evolution. Our basic Skeleton, with ribcage and spine began in the sea. Most mammals have four limbs and two ears and eyes respiratory, cardiovascular, lymphatic, and digestive systems. Most mammals give birth in the same way and care for their young for a certain time. Our basic hormones of testosterone and oestrogen operate similarly in us as other animals. Most of our neurotransmitters like dopamine and serotonin we share with other animals (see also [chapter 13](#) in this volume).

Basic Motives

As with bodies, so too with motives. Understanding what our basic motivational systems are up to and how they can capture and regulate the mind is important for compassion. Many of our basic motive systems are very old, and serviced gene replication very well in earlier environments. So we share with other mammals many basic motives and desires. Like them we desire to stay safe, to find lunch rather than be lunch, to find sexual partners with whom to engage and reproduce, to develop attachments to our offspring, to privilege our offspring over those of others, to compete for status and position within our social groups and avoid marginalisation and rejection; and we can be very tribal and aggressive to out-group individuals (see also [chapter 15](#) in this volume).

In CFT, motives that are focused on social relationships and provide guides for creating different types of relationships (e.g., sexual, competitive, cooperative, caring), are called social mentalities [\[9\]](#), [\[10\]](#). A social mentality organises attention cognition, behaviour and feeling. Think how all these will be different if one is approaching another living being as a potential sexual partner, an

enemy, or a person one wishes to care for [2], [9]. Each social mentality has, at its core, a motivational system to create a certain type of relationship. When other individuals respond in a reciprocal manner, then a social role is created and the motivation is fulfilled. Without motivation there is no means to trigger these attention, thinking, feeling and behavioural competencies in the social context. A social mentality is more complex and than a motive in that it is reciprocal, dynamic and co-regulated through the unfolding relational process sometimes in a moment- by-moment way. For example, two friends start a discussion and then gradually they develop an argument – shifting therefore from an affiliative-cooperative to a more competitive and even aggressive interaction -but as this happens they may wish to pull it back into the affiliative cooperative relationships and so begin sending signals to do this. Provided both flow in that direction, the affiliative cooperative relationship is restored or maintained. If however one individual stays angry or upset, that would then block the cooperative affiliative mentality in both individuals. Social mentalities are rooted in both motivational models *and* communication or processes.

Clearly compassion is a type of social mentality because it arises from signals in the outside world that trigger motivational states, communication and social behaviour within the self. Compassion is loosely regarded as a form of pro-social motivation – that is one is motivated to take an interest in others, to be helpful and sharing; not only relieving stress but also facilitating the other person's well-being[11], [12]. This is linked to the evolution of altruism that evolved from the benefits of sharing, mutual helping, affiliative bonding, and parental-caring[1], [13], [14]. With the evolution of various cognitive competencies such as for imagination, perspective taking and empathy, these social motives and behaviours became more complex and reciprocal [1], [15]. Loosely described, human prosocial behaviour involves a variety of processes such as taking an interest in others, developing an empathic understanding about the mental states and needs of others, feeling forms of pleasure from sharing, creating joy for others, helping others when they require help (for example children helping another child with their homework) or when distressed [11]. Crocker & Canevello[16] looked at self-motivation and self-identity and compared compassionate-self goals with self-image goals. For compassionate-self goals, students were asked how much they had tried to be 'supportive of others,' and 'have compassion for others' mistakes and weaknesses'. In contrast, self-image goals are primarily self-defensive such as how did one try to 'convince others that you are right,' or 'avoid showing your weaknesses.' The findings are revealing in that although our economic systems often encourage people to be competitive and self-focused, in fact self-image goals predicted conflict, loneliness, and fearful and confused feelings, whereas compassionate self goals predicted closeness, clear and connected feelings, and increased social support and trust over the semester. It is also recognised that increasing rates of mental health problems may well be linked to the way in which there has been a shift towards materialistic self-focused values away from community and mutual support[17].

It makes senses then that compassion training such as CFT would focus on people thinking about and cultivating a *sense of being a compassionate person*. CFT uses method acting techniques, that involve body postures, facial expressions, practising voice tones, as well compassionate thinking, behaving feeling and, focusing[8]. There is increasing evidence that practising acting as a self that one first imagines, can produce changes in emotions and actions[18]. So for example a person maybe trained to ask themselves in any situation –“if I was the most compassionate person I could be, how would I act in this situation, how about act right now?”, in other words, to stop and literally imagine themselves thinking and acting compassionate ways.

Basic Emotions

Motivations can be cultivated and built; they are with us all the time with different degrees of activation. Emotions guide motives and wax and wane according to how our motives are going.





The types of our emotions are linked to the type of our motives. If we are motivated to be kind to someone, then hurting their feelings can make us feel bad and sad, but if we are motivated by vengeance then seeing someone hurt might make us feel powerful and good! The anger you might feel toward somebody you love over a conflict might be quite different to the anger you feel toward somebody you see as your enemy and you hate. It can therefore be problematic to see emotions as single processes outside of social-relational and motivational contexts (their social mentality).

Role of Emotions and Motivational Systems

Emotions are commonly described as positive and negative – but this is misleading. Anxiety that you act on and which saves your life is hardly negative. Positive emotions of pleasure (e.g., eating) associated with drive and obesity are hardly positive! What we generally mean by “positive” or “negative” is whether we *like* them or not – but even this is tricky because some degree of anxiety as in parachute jumping can be experienced as part of excitement and pleasure, and pain can be experienced quite differently in the context of a sexual sadomasochistic relationship than in everyday life. So it is better to think of different types of emotions in terms of their *evolved functions*. When we do this, some very important insights arise (see also [chapter 18](#) in this volume).

While there are many ways to explore different types of emotions, there is no agreed functional analysis of emotional systems. Panksepp[19], [20] uses neurophysiological studies to distinguish a number of different functions for emotions. These include: 1. A seeking system which is basically linked to drives to go out and achieve things necessary for survival; 2. an anger/rage system that is triggered when motives and drives are blocked; 3 a fear system that is triggered when the animal is under threat of harm or loss; 4. A sexuality/lust system that is orientated to specific targets with specific behavioural outputs. 5 a care and maternal nurturance system; 6. a grief system for attachment loss, that is linked to protest-despair and 7. a play system that is linked to joyfulness.

Compassion however doesn't map on to any single dimension. Although compassion would be most linked to caring, the capacity for playfulness and gentleness may also be important, while the regulation of anger and anxiety would play a role too. Moreover, some of these functions can be grouped together. For example, anger and anxiety along with disgust are regarded as part of a threat-protection system[21]. In regard to positive emotions again there is no agreed functional classification. However, in a major review Depue & Morrone-Strupinsky[22] noted that some positive emotions are activating while others are calming – that is, different types of positive emotions can have opposite effects on physiological systems.

Clinically this is a very important distinction. Activation emotions depend upon the value of a resource. So, for example, winning a £10 lottery will have a very different physiological effect than winning a £10,000,000 lottery! Activating emotions are linked to drives, seeking and competing. However, Depue & Morrone-Strupinsky direct attention to a different form of positive affect of calming and ‘peaceful well-being’. Once a goal has been obtained, (e.g., food has been acquired, and the animal is not under threat) drive systems need to be ‘turned off’ to produce contentment or quiescence and balance energy expenditure. Depue and Morrone-Strupinsky[22] suggest that the system responsible for such contentment can be regarded as a *specialized affect regulation system*. It is behaviourally calming rather than stimulating and is accompanied by positive affect and different neurophysiological patterns of neurotransmitters. Our recent research has shown that feeling ‘safe and content’ can be distinguished from a relaxation type of emotion which can be distinguished from an activated, excited type of positive emotion[23]. Key to thinking about why this emotion regulation system may be important in compassion is the fact that it seems to have been incorporated into the evolution of attachment, whereby a parent is able to calm a distressed infant

and her presence creates a sense of safeness and calmness which will allow exploration, as well as sleep[5]. And of course we know that when we are distressed and turn to others from whom we receive kindness – this calms us down. So basically kindness tends to be calming rather than exciting.

From an evolutionary point of view, the shift from reptiles to mammals was to bring a complete change in social relating such that mammals found ways of staying close to each other in many domains of relating. This meant they had to evolve mechanisms for feeling safe and calm with each other and hence the signals they were sending each other were stimulating brain systems involved with calming (hence the social mentality was affiliative). This would be in contrast to signals that stimulated threat when in close proximity to each other and that required regulation of the fight/flight threat systems[9], [24]. This is particularly noted in:

1. the mammalian attachment system whereby a mother provides a safe place and point of stress reduction (e.g., through physical closeness and comfort the mother calms the infants). Important too, mothers are attentive to distress calls and will react to them with caring and protective behaviour. This may be the beginning of the evolution of sensitivity to distress and motivation to do something about it.
2. as mammals, and particularly humans, move into adolescence and sexual maturity they tend to turn to peers for sources of relating, enjoyment and safeness. Cooperation and alliance building grow[9]. The formation of friendships and mutual support networks become important and liking, trusting and sharing create feelings of social safeness and calming. Indeed, feeling socially safe and connected is a more powerful predictor of mental health than positive affect or social support[25].

There is increasing evidence that particular kinds of physiological systems underpin the experience of affiliative positive affect and sense of safeness in social relationships. Porges[24] suggests the importance of the evolution of the myelinated parasympathetic nervous system, which facilitated the regulation of threat and enabled the evolution of close and affiliative/loving relationships. In addition, particularly important is the neurohormone oxytocin (see also [chapter 13](#) in this volume). It is now known that oxytocin is important in long-term pair bonding, development of trust and liking, it facilitates mentalising and theory of mind, and the stress buffering effects of affiliative support (for a review see MacDonald and MacDonald[26]). So to cut a long story short we can distinguish between three different types of functional emotional systems which are qualitatively and experiential distinct:

- *Threat and self-protection focused systems* – enable detecting, attending, processing, and responding to threats. There is a menu of threat-based emotions such as anger, anxiety and disgust, and a menu of defensive behaviours such as fight, flight, submission, freeze etc.
- *Drive, seeking and acquisition focused system* – enable the paying of attention to advantageous resources, and with some degree of ‘activation’ – an experience of excitement and pleasure in pursuing and securing them; the positive feelings from doing an achieving/winning.
- *Contentment, soothing and affiliative focused system* – enable a state of peacefulness and openness when individuals are no longer threat focused or seeking resources – but are satisfied. These are also linked to feelings of well-being. Over evolutionary time, this system of calming has been adapted for many functions – the most important for the understanding of compassion is that of attachment, caring and affiliative behaviour. The system is linked to the endorphin-oxytocin systems which function is to promote trust and affiliative behaviour.





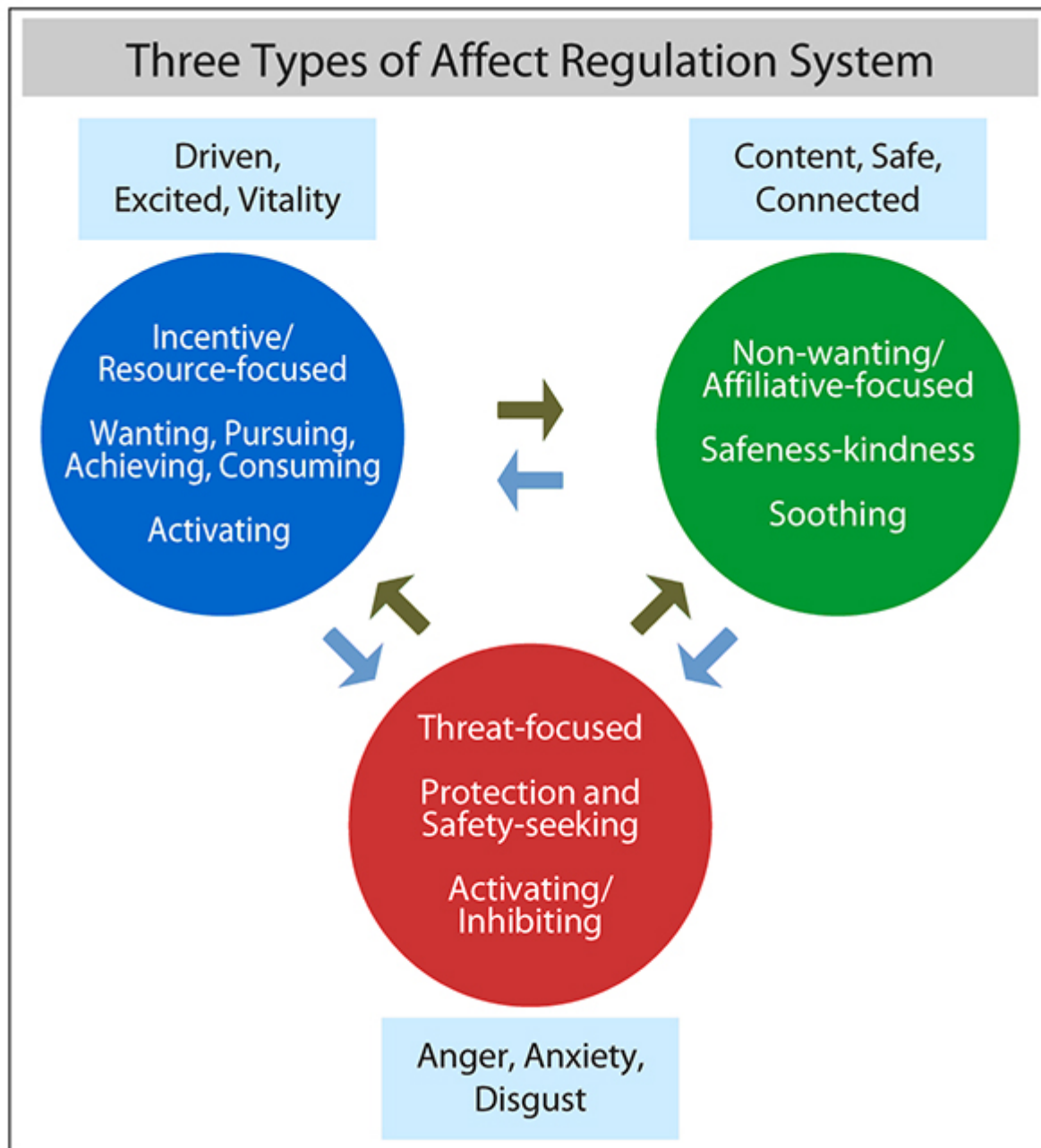


Diagram 1. From P, Gilbert (2009) *The Compassionate Mind*. With kind permission Constable Robinson

These types of emotions will occur in various combinations in social relationships and change over time. For example even a loved person can at times feel like a threat if they are critical of us; or stimulate drive emotions in doing things together that are exciting (rather than alone), whilst just being with loved others can be calming and offer a sense of safeness and peaceful well-being.

Affiliative emotions are important to the experience of compassion. Imagine how compassion would be if one couldn't have affiliative emotions and feelings of kindness were difficult to generate (see also [chapter 3](#) in this volume)? However, compassion is not just about affiliative emotions because emotions associated with compassion can be quite different according to context. This is why motivation is the core to compassion. For example, the emotions that are associated with compassionate behaviour in those who are in the rescuing services (e.g., fire service) that require considerable courage and physical action are likely to be quite different to compassion that arises in psychotherapy as one is making sense of distressing, internal mental states. Individuals who

have a kindness and warmth about them may not be the most courageous and those who are courageous may not be the kindest or warmest of individuals. Upholding moral behaviour and working to create a more just world is clearly linked to compassion but the emotions here are again complex – what is central though is motivation.

The link between the triggers for compassion and emotion are complex and context dependent. So while we typically associate compassion with the emotion of loving kindness we must be cautious not to over-identify the triggering of compassion motives and behaviour with these emotions because sometimes it can be fear that generates compassionate action – such as running into the burning house to save a child. It was with both sadness and anger at government procrastinations that Sir Bob Geldof and Midge Ure developed Band Aid and Live Aid to raise money for the North African famines³. However, again core to compassion is the fact that evolution has created styles of relating where individuals have an interest in the well-being of others, are able to understand the feelings and needs of others, and therefore how act to reduce distress and increase well-being. Individuals who struggle with being able to think about, mentalise and theme tune with the feelings of others can struggle with compassion even if they are compassionate and motivated. So threat emotions can function as entry points to compassion – they signal the presence of suffering and injustice and cue us to act.

Getting Smart

Most mammals will, of course, be enacting their motivational repertoires according to basic emotional experiences and relatively basic cognitive processes. Human compassion, however, utilises certain types of human competencies for thinking, imagining, having empathy for others and so forth. For example, many animals will care for their young but with a few exceptions, caring for the old, sick or non-kin individuals is rare. However, the fossil record shows that about one million years ago, humans were surviving who had severe injuries and diseases and they could only have done so if they had been looked after. Caring in human evolution suddenly explodes into this capacity for understanding suffering, understanding what to do and extending caring to humans who could not have made a contribution but who presumably were loved and valued[27]. Compassion moves beyond basic caring.

When it comes to human regulation of motivation and emotion, evolution tells a very fascinating story. About two million years ago, there were changes occurring in primates, such that they began to become smart. We can trace the evolutionary stages of becoming smart in the fossil records. It was a range of changes in things like the thickness of the skull that enabled brain growth, the movement of the larynx that enabled speech and the massive expansion of the cortex¹⁵. Recent work comparing chimpanzee and human DNA is discovering a range of genetic changes that seem to have played role in giving us a *new type of brain* that can analyse and process information in completely new ways to chimpanzees and other primates[28]. What this means is that humans now have brains that are capable of imagining, reasoning, anticipating and planning. We can run simulations in our mind and be very active in problem solving, creativity and innovation, and imagining what's going on in the minds of others. We have what Suddendorf & Whitten[29] call a *collating mind*, one capable of using symbols and integrating a phenomenal amount of information, to derive insights into higher conceptual rules and processes. For example I can understand that you understand that he doesn't understand what I'm saying. I can develop desires and then find highly creative ways of fulfilling them. Humans can understand the link between sexuality and reproduction and deliberately interfere with it with contraception. Equally, we can use this intelligence for cruelty, for building weapons and to soak up the vast resources in the research manufacturer and the selling of weapons.





The Downside of Getting Smart

As we begin to understand our minds we become compassionate for the fact that actually evolution has set us up with a lot of problems that are not our fault. A lot of what goes on in our minds is driven by motivational systems that are very old and evolved long before our new capacities for imagining, anticipating, and planning, and these old systems can hook up with these newer competencies and run simulations. Consider a zebra running away from a lion. What happens when the lion gives up and the zebra is safe? Well, once the lion and the danger have passed, the zebra's physiology will settle down reasonably soon and allow it to re-orientate itself to "in the moment tasks". What would happen for a human, however? The human will have an experience of relief, but they may also focus on the fact that they could have been caught and then they'd be eaten alive!

Images of being eaten alive flood their minds! They wake up in the middle of the night thinking "oh my goodness, what would have happened to me if I had been caught, I would be dead now?". They wake up the next day and think "oh my goodness, what will happen to me if I don't spot the lion today and it gets me? What will happen if my children go out to play and they don't spot the lion and it gets them? I will never be able to go out again and feel safe in that environment". Humans can imagine the potential for pain, terror, suffering and death in a way that other animals cannot.

The human brain can constantly think about 'what ifs... and suppose that's....' and this capacity for planning, anticipating, imagining and ruminating is the source of our creativity but it can also drive us into very severe (suffering-making) loops. We can become anxious, which creates an anxious mindset of attention focusing and reasoning and then we become more anxious. We get trapped in these loops. The threat system can take control of what we think and how we allocate attention. For example, imagine you go Christmas shopping and in 9 out of 10 shops, the shop assistant is really helpful to you, and you buy a present that you're very pleased with. But, in one shop, the assistant is very rude and you end up buying something that you didn't really want and paying more than you really wanted. Who do you talk about when you go home? The chances are you will talk about the one who has sold you something you don't really want and you'll focus on your anger and annoyance, despite the fact that 90% of the people that you encountered were really helpful. Importantly, it's unlikely that you will focus on them, even though by doing so, you will feel much better about the world and your place in it. So, our threat system can be stimulated in one way or another and then can recruit our capacities for thinking, anticipating, imagining (and so on), which create these loops that we often can't get out of. For the most part our threat system is looking out for us and our kin. We don't feel anxious because people in another country are being bombed - but we would if our own child was there on, say, a student visit.

This is important because we can stand back and understand how self-focused the threat system tends to be and how much it creates loops in our minds. The key thing is that the way this works *is not our fault*. We didn't design our brains with these glitches in it, nature did. Many humans get caught up in these loops and glitches, be it for anxiety, or anger and vengeance or self-serving desires. Once we're caught in the loop, then getting out can be difficult. This is a tragedy when it comes to group violence and how one group may constantly ruminate, plan and carry out acts of violence and cruelty against another group – but even tribal violence is not particularly human and it has been observed in various primates including chimpanzee[30]. Humans can use their new thinking capacities to do truly horrible things, and these can become a focus for post-traumatic disorders of whole populations – which then can create a generation of vengeance seekers.

Implications for Compassion

The evolutionary story tells us that we are *set up* to

1. Live a short-life with birth, a need for nurturing from which we flourish then decay and die.
2. Our brains and gene expressions (phenotypes) are sculpted by our environments.
3. We have within us the seeds for becoming Angels or Demons because evolution has created different motivational and emotional systems that can be easily triggered in certain contexts.
4. We are vulnerable to creating loops in our minds, especially in the threat system. These loops keep us focused on the perception of threat, feeding our anxiousness, frightened paranoia and aggressiveness because this is what our threat-defence system has evolved to do; a kind of 'better safe than sorry'.
5. Evolution has built all kinds of biases into us[31] such kin biases where, we give much to our children but very little on the children starving in other parts of the world; we privilege our own group over the needs and wishes of other groups even to the point of exploiting other groups to feed our own wants and 'cultivating hatred'[32]. And of course groups can be divided on different lines including gender, religion and race.
6. In terms of drives, evolution has built us to be relatively pleasure seeking, self-focused and kin-focused because that's advantageous to gene replication.
7. We have also evolved into a highly social species. As mammals we form attachments that require us to be soothed and encouraged in supportive, caring relationships. We have neurophysiological systems that are specifically orientated to detect and respond to kindness and caring. As we mature friendships and alliances become an important source for feeling safe in the world.
8. We have evolved a smart brain that is capable of thinking about the minds of other people and understanding that other minds have feelings and motives and can suffer. Indeed it is this aspect of our minds when linked to caring motivations that becomes genuine compassion. Hence compassion is more than caring. It is about the ability to comprehend, to mentalise, to be in tune with the experiences of others and motivated to create states of mind within them that are freed from suffering and able to live in states of well-being and peacefulness.
9. The desire to become a compassionate person focuses our intentionality and self-identity and helps us to train our minds versus the mind that is simply reacting to whatever stimulus happens to arise.
10. Our ability to experience compassion from others and self-compassion are linked to capacities for affiliative emotions as is love. Compassion to others especially, when focused on rescuing people from danger or the higher principles of morality, fairness and justice may be less dependent on affiliative emotion and more moral maturation and complex traits like courage.

As we begin to become more mindful and wake up to understand the kind of mind we have inherited from evolution, then it becomes possible to see how compassion regulates the mind with soothing qualities and creates certain types of affiliative relationships with others. As we see the benefits of compassion on our own well-being and that of others, we can choose how to cultivate it – not only in personal practice but also in the world and social conditions we wish to create. We recognise the power of social context for the growth of the young, and those yet to be born and whose minds and genetic expressions are yet to be shaped in those environments.

There is now good evidence that feeling loved (in contrast to feeling unloved or unwanted) and being loving (in contrast to be indifferent or hating) helps us to function most optimally in terms of stress hormones, immune system functioning, frontal cortical processing, creativity and fosters





happiness, and much more besides[33] (see also [chapter 13](#) in this volume). It is not that our basic nature is loving or compassionate, any more than it is potentially cruel and violently tribal – for these are all potentials within us – it is that cultivating a loving nature stimulates within us certain evolved motivational systems and evolved cognitive competencies. It brings into the world the ‘best’ in us, helps us to function optimally and find genuine kindness and feelings of connectedness, on this short struggle we call life. In creating a more harmonious and just social world, we will all benefit.

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Sound Collage

2:04 min

Buddhist Voices

Nathalie
Singer

Chapter 8

Human Suffering and the Four Immeasurables

A Buddhist Perspective on Compassion

We must understand the real causes of suffering

Compassion begins with the move from self- to other-centeredness

It is important to be mindful of far and near enemies of compassion

Diego
Hangartner



Human Suffering and the Four Immeasurables

“We all want happiness and do not want suffering.”

(His Holiness the Dalai Lama)[1]

This simple but profound truth lies at the core of our daily life. If we step back for a moment and consider, it becomes evident that most of our activities are indeed aimed at the avoidance of suffering and the creation of happiness. While everyone wants happiness, for some reason this is not how things turn out.

There are basically two kinds of happiness we seek: physical happiness and mental happiness. Physical happiness is often related to material things, whereas mental happiness stems from inner or spiritual development. Depending on where we seek, and how we develop those sources of happiness, either in the physical accomplishment of material possessions or in the inner development of mental factors, determines how we lead our life.

Though there are many spiritual and non-spiritual traditions in this world, and each tradition has an answer to the question of what brings happiness, it is evident that a materially-developed environment and lifestyle cannot be fulfilling: it lacks the dimension of mental accomplishment. Physical well-being alone does not eradicate the causes of mental suffering. Since mental happiness mainly derives from inner attitudes, and cannot be limited to providing food, housing, and clothing alone, it must include replacing the fundamental causes of suffering with the essential causes of mental flourishing.

Once we understand that the main sources for attaining happiness and relieving suffering are closely related to our state of mind, we begin to understand where the important change has to happen.

The Tibetan Buddhist Perspective

Among the many existing concepts, views and theories of mind, it is the Buddhist perspective that presents us with a deeper examination of how the mind works. Moreover, it offers an answer to the question of what constitutes the roots of mental happiness and suffering, and provides transformative practices that lead to the alleviation of suffering and its causes.

The framework of Buddhist practice hinges on three fundamental concepts: View, Meditation and Action. The View, or outlook, is based on an understanding of the nature of reality; from this understanding one's outlook and attitudes will be derived, as well as one's aspirations and ethical value system. Meditation can be understood as an intentional formation of habit; it is the internalization and integration through mental cultivation of insight, compassion and other beneficial mental qualities. Action is the conduct that engages in activities from a transformed state of mind, heart and being[2].

What follows is a short essay on how compassion is understood in the Tibetan Buddhist tradition, on the concepts of suffering and its causes, as well as in what way compassion can be trained through the outlined concepts of View, Meditation and Action (see [Box VII](#)).

Overview and Sources

The Tibetan Buddhist tradition has a vast number of texts, both translated from Sanskrit into Tibetan and, over centuries, newly written volumes of Tibetan origin. The original canon is organized into three categories: the *Sutras*, the *Vinaya* and the *Abhidharma*. Most of the texts called *Sutras* deal with the discourses of the Buddha and his life stories, the *Vinaya* with monastic discipline, and the *Abhidharma*[3] broadly speaking with Buddhist psychology and metaphysics. Based on those source texts, many commentaries were written with the aim of elucidating the respective meanings and applications. They investigate aspects of reality and expound concepts of mind, metaphysics, philosophical systems and meditation. Some of these texts can be extremely technical, while others are very practical. Among those many texts, two stand out for training meditation and compassion: “The Stages of Meditation”[4], by Kamalashila, and “The Way of the Bodhisattva”[5], by Shantideva. Both texts were written between the 8th and 9th centuries CE and have been very influential in the development of Tibetan Buddhism. They are also very practical since they can serve as manuals for meditation, training mental qualities, and as guidelines for conduct in daily life.

They both elucidate in a clear way what destructive emotions are, why they lead to suffering, and investigate whether there are any forces that oppose these afflictive emotions. Once the mental qualities that oppose suffering-inducing emotions are identified, the texts explain how to develop virtuous qualities of the mind that overcome negative emotions, and also how to stabilize the mind once it has developed these positive mental qualities.

Suffering

In order to understand suffering, we need to look at the different types of suffering. Within the Buddhist worldview, three categories of suffering are identified:

1. Suffering of suffering
2. Suffering of change
3. All-pervasive suffering

The first suffering is the apparent suffering, such as a fever, a bruise or some other ailment. These are also called the obvious forms of suffering, as they are apparent and clearly unpleasant sensations. However, besides being evident, they are often also compounded: on top of feeling feverish, we have a headache. This is why this type of experience is called the “suffering of suffering”.

The second category is called the “suffering of change”. You may feel cold at one point and you go to a hot place to warm up – but then it gets too hot, and again you want something cooler; you are hungry and thirsty, and after you have eaten and drunk you feel that you have consumed too much; when you are tired from standing you want to sit down, but after a while sitting down you again feel uncomfortable, and you want to get up. The relief from one condition, in itself, can be the cause of suffering after a while. This is why this kind of experience is called the “suffering of change”: a relief from one situation carries in itself the nature of change. It is part of our existence.

Sometimes we experience predominantly the first suffering, the “suffering of suffering”, and sometimes we feel more of the second one, the “suffering of change”. It is important to understand

that there is a clear differentiation between pain and suffering – they are not the same. Pain is the sensation triggered by a physical experience, while suffering is the mental experience of dissatisfaction, displeasure and distress (see also [chapter 14](#)). While these two sensations are often experienced together, they do not necessarily manifest themselves at the same time: pain and suffering can clearly be experienced independently.

Underlying all these superficial and rather coarse forms of suffering, however, is another presence: a constant degree of dissatisfaction, an ongoing sensation of restlessness, a feeling of wanting one thing and not wanting another. This is the third kind of suffering called the “all-pervasive suffering”. This suffering is closely related to our mental tendency towards clinging and aversion. The main cause of its arising and presence is not principally related to the body, but much more to the fact that we fabricate a mental image of reality. We are attached to pleasurable objects, sounds, odors, tastes and feelings, and because of that, we think that they are real and that they are genuine sources of our happiness. Conversely, aversion arises to whatever interferes with and threatens those pleasing sensations and attractive objects. Although we resist it, the evident fact is that nothing is a continued source of pleasure. We accordingly misapprehend reality. Now, if we look closer and deeper, neither sensations nor objects exist independently of each other. Nor do they have an existence that is independent of how they appear to us, how we perceive them, and what we project into them. This misapprehension is called ignorance. In this context, ignorance is not understood to be a lack of knowing everything (such as the content of every book written), but holding a wrong view of reality.

It is important to understand that mental experiences such as sadness, happiness, attachment and aversion, as well as compassion and insight, are not independent phenomena. Although these experiences manifest themselves within the mind, they are not the mind itself. They are caused, and accordingly change, and because they are variable they can be altered and, with the right antidotes, even replaced. On the other hand, it is also a fact that certain mental states cannot exist at the same time, such as hatred and loving-kindness. A deeper investigation of how mental phenomena arise, remain and disappear reveals that mental perceptions are co-dependently produced and empty of a solid quality. In order to overcome suffering, one needs to develop both wisdom and compassion, as it is not possible to understand (=wisdom) and develop the antidotes (=compassion) to one without the other. It is therefore crucial to think of compassion not only as a technique, method or as training, but as something that affects deeper traits of human nature and is closely related to wisdom (see also [chapter 9](#) and [preface](#) on training).

At this point we will not explore the concept of ignorance much further, but suffice it to say that Buddhist practice and studies are specifically concerned with this third level of suffering and its causes. Knowing this third level – understanding reality, interdependence, impermanence and the wrong apprehension of “self” – is at the core of Buddhist practice: not properly understanding how the mind creates an illusion of reality is considered the main cause of suffering. It is the alleviation of this third form of suffering where the Buddhist tradition has boundless wealth and wisdom to offer.

If we look at how the modern world operates, it becomes obvious that it is primarily concerned with the avoidance of the first two forms of suffering, the “suffering of suffering” and the “suffering of change”. This is one of the limitations of a hedonistic self-centered lifestyle, where one is primarily concerned with one’s personal pleasures and where one tries to ensure that the external condition of one’s well-being does not change (and if it does, then only towards more favorable situations, and preferably with our consent). But what happens when a mental crisis hits us? When we lack self-esteem, feel sad, are despondent, angry or frustrated? When our mental balance is thrown out of its temporary poise? What we are experiencing at such unwarranted moments is “all-





pervasive suffering”. While, from a Buddhist perspective, these subtler levels of suffering are always present, skillful mental training, based on compassion and insight, will modulate and eventually even remove all three levels of suffering.

As mentioned before, when there is a temporary state of balance, without manifest problems, we may call this happiness. When you don’t experience suffering on the surface, in other words the coarse levels of suffering, you may not be aware of the nature of your condition and all may seem fine. But that temporary state of happiness is not stable: we immediately experience a strong emotion when a thorn pricks us, or when we cut our finger. If we look closely, we will see that the first experience is “I have a new condition, I am suffering”. What is the immediate response to such a sensation? “I don’t want this, I want to get rid of it.” This immediate response can be considered as a rudimentary form of renunciation, the wish to overcome this unpleasant situation.

Why Cultivate Compassion?

The importance and value of loving-kindness and compassion cannot be overstated. All spiritual traditions speak of it. Within Buddhism, the cultivation of compassion stems from a conviction that by moving from self-centeredness to other-centeredness, one sees the world more clearly. Only by seeing reality more clearly and accurately do we begin to recognize the actual condition of our existence, and this understanding will lead away from suffering. Consciously developing concern for others is an integral part of one’s own growth. Since compassion builds on unmistakable insights through investigating existence, compassion is not naive but very realistic.

From a self-centered perspective it is characteristic to think: “I am suffering enough as it is, why should I care about the suffering of others?” This is a reaction that shows how limited our ordinary perspective is, and is evidence that we don’t know how deluded we are. We misapprehend reality and think of our “I” as an independently existing entity. We are suffering precisely because of our self-centeredness, and it is this faulty clinging to an independent “I” that is the main source of our mental suffering (not pain). Wisdom is the sustained insight into the wrong understanding of, and clinging to, an independent “I” (for more details about wisdom, see [Chapter 9](#)). The antidote to our erroneous clinging to an autonomous “Self”, and to the sufferings that stem from this, is compassion. Therefore, developing both wisdom and compassion forms the core of practice, and it is only with both of them together that the mind can be cleared – like the two wings a bird needs for flying.

A further reason is more practical in that there is less personal suffering once you move away from a “me, I, poor me”-centered worldview. If we really look closely, most of the suffering and frustrations we experience are related to questions like, “Why do I not get what I want?” “Why did I get something I did not want?” “Why me?” Besides the simple fact of getting something we did not want, and not getting what we wanted, we have a strong habit of compounding the situation with additional mental distress.

As pointed out above, there are many discrepancies between the way things appear and how they really are. It is an undeniable fact that we are not independent of others. Since we survive thanks to the generosity, kindness and support of others, our personal happiness and our well-being – directly and indirectly – depend on their well-being.

Because of our dependency on others, once we seek to benefit them, our own happiness will emerge as a byproduct. This is important to understand: happiness is not the primary reason why we develop compassion, but arises as a secondary benefit. We all know how good it feels to have been kind to somebody. Wanting happiness is not the primary reason, because there is one small

catch to this equation: if you want to have happiness, there is still an “I” that clings to the wish to be happy. Anything that threatens this “I” that wants to be happy will be perceived as hostile, and this often creates more anxiety and agony. Developing compassion goes further than just creating happiness: it uproots our deluded clinging to the “Self”, the main cause of suffering.

In the Buddhist tradition, compassion tends to be much more focused on the causes and conditions of suffering rather than the actual suffering that is occurring. This is because the suffering that is already taking place is considered a resultant state. In some sense it is already a consequence of many conditions that have preceded it. When you look at the causes and conditions preceding the suffering, the realization arises that this person, or being, can be helped because by changing the causes and conditions one can alter and prevent the current of the resultant suffering[6].

The Four Immeasurables

When we look at the notion of compassion, it is important to understand that compassion is not just one isolated skill or trait, independent of others. In the Buddhist context, compassion is considered one of four *Brahmaviharas*, or

Four Immeasurables: together with compassion, the other three are loving-kindness, joy and equanimity. They are called immeasurables because they are virtuous qualities of the mind that can be developed limitlessly.

The four *Brahmaviharas*, with their respective Sanskrit terms, are defined as follows:

- **Loving-kindness** (Skt. *maitri*) is the deep-felt thought, “May all beings have happiness and the causes of happiness.”
- **Compassion** (Skt. *karuna*) is the felt thought, “May all beings be free of suffering and the causes of suffering.”
- **Joy** (Skt. *mudita*) is the wish, “May all beings have joy and flourish, and continuously increase their well-being.”
- **Equanimity**, or impartiality, (Skt. *upeksa*), is the understanding that each and every single being wants happiness, and is therefore the wish, “May all beings everywhere experience well-being and flourish.”

The definitions of loving-kindness, compassion and joy each have two parts. The first part of the definition addresses the motivational aspect, the aspiration that you wish for something to be a certain way. It is important to realize that in this understanding and definition of compassion you are not excluding yourself. Compassion is not about excluding, or sacrificing, yourself at the cost of others’ well-being. This is why it speaks of all beings, including yourself: “May I also be free of suffering and its causes.” However, by the same token, one should not understand it as: “May I be free of suffering at the expense of others”. It cannot be stressed enough how important it is to think that others too want to be free of suffering, be that the person in front of you or any being with whom we share a moment in life.

The second part of the definition speaks about the causes. Adding the causes becomes the concrete action: it is the step that manifests the aspiration, when you engage in realizing the wish. It’s not just the wish that will make a difference, but primarily changing the causes will contribute to the well-being of oneself and others. When somebody is sick, a doctor is not just wishing for that





person to be well and free of suffering, but acts as best as he or she can to correct the condition. From a Buddhist perspective, the ultimate cause of suffering is ignorance – a misapprehension of reality's interdependence, and bringing insight and clarity into that delusion will lead to the eradication of suffering and its causes.

As we can see from the explanations above, the development of compassion does not follow a single path. Compassion is not an independent skill, nor is it a tool that creates happiness; it is more a way of being. Hence one should not think of having compassion, while useful, but rather of being compassionate. Accordingly, compassion is closely related to ethical behavior and conduct. Since they are highly correlated and co-dependent, the four Brahmaviharas are always taught, trained and remembered together, as they benefit and strengthen each other.



Diego Hangartner
"Loving Kindness Meditation"

16:39 min

Enemies of the Four Immeasurables

When we think of compassion, we need to be aware that there are also opposites and enemies to compassion. Some of these enemies are very obvious, while other antagonists are often not easily identified: they are disguised, deceiving and look similar to the positive emotion itself. Correspondingly, one speaks of far and near enemies. It is important to be mindful of both far and near enemies – otherwise the practice is tricked and the application misled.

When we look at loving-kindness, the obvious far enemies are hatred, enmity, aversion, anger and hostility. When we are in a state of hatred it is impossible to be loving and kind at the same time. However, there is another emotion that disguises itself as loving-kindness. This feeling is desire, or in a weaker form, attachment; both are near enemies of loving-kindness. At first, attachment in disguise might appear to be alike, but it is not the same because of its motivational factor. In relationships, for example, we may see the partner as the cause of our own well-being. When there is no true loving-kindness, the wish of “May you be happy and have the causes of happiness” ends up being “May you be the source of my happiness”. This is attachment masquerading as loving-kindness. Many relational problems, or relationship breakdowns, are due to attachment and desire in disguise. Desire, attachment and, related to that, expectations, are often the underlying dynamic forces behind what we believe is love. It's very important to identify these traits in one's consciousness and to differentiate these near enemies clearly from loving-kindness.

The same dynamic is true of compassion. The far enemy of compassion is cruelty, which again is obvious: you cannot wish for some being to be free of suffering and at the same time cause it harm. Cruelty can also appear as a mere wish, such as “May you experience suffering” or “I will annihilate you”. In close vicinity to compassion, and often understood as compassion, another emotion can appear: it is pity, the near enemy disguised as compassion. Pity is the feeling of sorrow for the misfortune of oneself, or others. Pity is not useful. It engenders a sense of superiority, and that feeling of supremacy is a cause of arrogance and countless related problems. Pity also blocks one's impulse and activities to alleviate suffering in an appropriate way, and it can even lead to more sorrow. It seems that in our culture pity is often misunderstood for compassion: “If you don't feel pity, you are indifferent to distress, and cannot feel compassion”. Using pity in this

context is not properly understanding the causes of compassion. Pity is present when we feel sorry for somebody's unfortunate situation – and go on minding our own business. This is why pity is not compassion, because it does not lead to actively alleviating suffering. Pity also deludes our clarity, and correspondingly, our so-called helpful and compassionate act might even increase misery. While pity and sorrow are human emotions and, combined with empathy, can be a cause of compassion, sorrow can also act as a trigger for anger and rage.

The far enemies of “sympathetic joy” are cynicism and despair combined. If you are cynical, or in despair, you don't really experience joy; again, it is impossible to feel both opposites at the same time. Although the Tibetan tradition speaks of “sympathetic joy”, it more often talks about rejoicing in virtues. Virtues are defined as the causes of happiness, and when rejoicing in virtues we are taking

delight in the other person's joy and fruition of their causes of happiness. The near enemy of “sympathetic joy” and rejoicing is frivolity, such as the feeling that “all are happy, all is well and all is good”. It may appear as if one experiences joy, but it is superficial and it lacks the depth of joyfully rejoicing and resonating with the other. With the feeling of sympathetic joy, there is not much that needs to be done – one just enjoys the delight of the others. It is the feeling we experience when our dear ones experience a happy moment, when we are thrilled for them and genuinely feel, “May your happiness increase and continuously grow” – like parents feel for their children's happiness.

Equanimity, or impartiality, too, has a set of enemies: the far enemies of equanimity are attraction and revulsion, while the near enemies are indifference or carelessness. Both attraction and revulsion pull us away from our mental calmness, and under the influence of both attraction and aversion we do not feel balanced and we lose our composure. The evenness of temper is destroyed by our mind's demanding of “I want” and “I don't want”. During impartiality you keep your senses open, and it contrasts with the bias we usually feel towards one or the other form of wanting. This is true for beings, for things and for circumstances. The near enemy to impartiality is indifference; it closes our mental receptivity and motivates us to say, “I don't care”. This mental state is not equanimity, because during impartiality you still care – you care for all in a similar way. Caring is the opposite of being indifferent (for more details about these differences, see [chapter 15](#)).

Furthermore, expectations regarding outcomes are often additional causes of disappointments. In many situations, expectations are the biggest obstacle to personal well-being and flourishing, since they are – if we look honestly – rarely met anyway. In being compassionate it is critically important to recognize the reality of things, and to be compassionate with oneself and accept where one's own limits are. It is additionally helpful to always remember that compassion is one of the Four Immeasurables, together with joy and equanimity; in many contexts it is particularly beneficial to be mindful of joy. Without joy, a possibly compassionate act will be more like a sacrifice and, in the long term, a lack of joy is exhausting and leads to fatigue.

Traditionally, when contemplating one of the Four Immeasurables, one is advised to alternate one's meditation. Focusing too much on compassion alone may indeed lead to gloom and sadness; if that happens, one should shift one's meditation, and focus on joy; if one meditates too much on joy, and becomes restless, one should focus on equanimity; and if impartiality feels too dull, one is advised to concentrate on loving-kindness.

To develop these abilities, the corresponding positive mental qualities, and the necessary clarity to discriminate, one needs to train them. This is why meditation as a mental training, and intentional formation of habit, is considered an essential resource.

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Chapter 9

Self, Interdependence and Wisdom

A Contemplative Perspective

A unitary, permanent, independent self is a mental fabrication, not real

We mistakenly perceive ourselves as separate and cut off

Buddhist wisdom shows us the way to break our habit of misperceiving reality

Barry
Kerzin



Self, Interdependence and Wisdom

We take for granted a solid, three-dimensional world with us somewhere in the middle. But when we take the time to investigate this, we find it is more confusing. Our mind plays a big role in forming our reality. Our ordinary view of ourselves as a solitary, unchanging ego cut off from others is a fiction. This is a view arising in the mind due to a distorted misunderstanding. It results in a worldview of “us versus them.” Actually, we are all closely connected on many levels. This understanding opens our heart to others, recognizing our connectedness and their kindness. This brings us closer to the wisdom of interdependence. In turn, this feeling of connectedness brings us closer to others, thereby enhancing our compassion.

“Our task is not to seek for love but to find the barriers within that we may have built against it.”[1] Rumi’s wisdom guides our pursuit of compassion. Breaking down our selfish barriers to compassion allows the natural compassion to flow unimpeded. Sometimes cultivating compassion directly, head on, leads to frustration. At times it can even be counterproductive. Professor Paul Gilbert of Derby, England, has researched people suffering from a strong sense of shame coupled with debilitating self-criticism. His findings suggest that cultivating compassion can be quite difficult, even frightening (see [chapter 3](#)). For them a direct approach to cultivating compassion can turn them away from compassion. For such people, it is better to cultivate compassion indirectly through complementary approaches like anger management, leading to patience, generosity and forgiveness, as well as other methods that work on generosity (see [chapter 4](#)). Complementary approaches enhance the cultivation of compassion not just for some but for all of us. Complementary approaches to compassion open the blocked floodgates, resulting in greater compassion.

So what is compassion? Compassion in its fuller form is altruism. Both share the essential feature of the wish, the commitment and the action to reduce suffering. Initially there is the wish to relieve suffering. As we develop more confidence, our commitment grows. This leads to action. Wisdom helps us see a broader perspective so that our action is successful. This is different from empathy (see [chapter 15](#)). Empathy is feeling what the other person is feeling. There is no commitment or action to lessen suffering (see [chapter 8](#)). Sometimes the term compassion is thought of as a religious term. Of course, compassion is the central theme of all major religions. Yet compassion is not limited to religion. In fact it is, as His Holiness the Dalai Lama says, beyond religion[2]. It is necessary for life. It is necessary for our survival. A newborn baby would not survive without the kindness, affection and compassion of the mother. Without food, warmth, protection and shelter, the newborn would perish. This compassion of the mother for her child is biological. It helps to maintain and perpetuate the species. Compassion and affection are also necessary for social development. Without love and nurturing, it becomes more difficult to cultivate prosocial behavior and live effectively within society. Such prosocial behavior, like helping, sharing, giving, cooperating and volunteering, are cultivated due in part to the influence of the kindness and affection of our mother or primary caregiver during our early years (see [chapter 4](#)).

Dukkha is Sanskrit for suffering. It means misery. It means angst. It means pain, illness, hopelessness and despair. This level of suffering is easily understood by all of us. Subtler types of suffering are more difficult to recognize. Going out to eat at a scrumptious buffet is pleasurable. But when we go for the third round, the pleasure wanes. This is called the suffering of change, when pleasure turns into misery. There is even subtler suffering that underlies the other two forms of suffering (see [chapter 8](#)). It is the misperception of reality. When we misunderstand ourselves as





unchanging and independent, conflict arises, it feels like us against them. This is referred to as conditioned pervasive suffering. It is a part of being alive and all ordinary beings are under its influence. When we see through the mistaken perception, the distorted ignorance will gradually fade. There was nothing there to begin with. It was always a mental projection, a grand illusion.

Training in compassion can be frustrating. Expecting immediate changes often leads to frustration. We all lack patience. Certainly I do at times. Our busy, stressful lives call out for “quick fixes.” If we do not see significant positive attitudinal changes in a short time, we are prone to disappointment. We may abandon ship and give up cultivating compassion. Therefore, working on many fronts by reducing barriers to cultivating compassion becomes a wise and efficient holistic approach. Simply recognizing these obstacles and working towards reducing and eventually eliminating them enhances our compassion. This is similar to a balance scale. When the obstacles to compassion go down, compassion simultaneously goes up. Our heart opens, making us less selfish. There is more concern for others.

Ego and Selfishness

These barriers are rooted primarily in our deep-seated attitude of selfishness. Selfishness focuses tightly on our own needs and desires. Narcissistically we center on I and mine. We are all selfish. We want our own happiness above anything else. In this way, we are all alike. This is our shared humanity. As human beings, naturally we want happiness, and naturally we shun misery. This is true of all living beings. The problem is, we don't know where to find meaningful, lasting happiness. Our inclination is to amass more and more for ourselves. Yet the self we try so hard to feed, maintain, bring pleasure and protect is not real. Nor are the perceived pleasures and threats. They are like dreams. This strong sense of an independent self is based not in reality, but in misconception. The ego is misperceived as unchanging. In reality, our ego changes with each moment that goes by. Over time the continuum of our ego is like beads on a string. Yet we do not see our ego this way. We see it as something unchanging and always the same. But the ego is nothing more than a concept or a name. It is merely the sound, “ee go.” It has no solid objective existence somewhere separate from the name, “ego.”

Sometimes we see our ego as a master or controller over our body and mind. It seems like it is separate, almost hovering over our body and mind. Sometimes it feels like our ego covers our body and mind like a sheath. It seems like a manager dictating how the body and mind will act. Yet when we closely examine and try to pinpoint this ego, we cannot locate it. In this distorted way, we tightly grasp onto something that is not real. These are fictions arising from the deep-seated belief in a solid, independent three-dimensional reality. We are not even aware that we have this belief system; we are so accustomed to it as it is so ingrained. Thus, we never even think to challenge this assumption. We just take it for granted. We never ask ourselves, “Is my perception of my ego correct?” We rarely, if ever, contemplate the nature of our ego. We never check to see if our perceptions are correct.

When we examine the world closely, we see it is always in flux. It changes every moment. The world we live in is based on a subatomic world. There is only the proton, the neutron, the electron and other rather exotic subatomic particles. Empty space makes up 99.9 to the 12th power percent of the atom. These subatomic particles are always in flux. The notion of change is built into the subatomic world along with the principle of relativity. When we try to locate the position of a particle, we cannot know its speed or momentum. Conversely, when we try to measure its speed, we cannot pinpoint its location. This is Heisenberg's uncertainty principle, which led to the development of quantum mechanics. Not only are position and momentum relative, but also the observation of a particle and its behavior are closely interconnected and mutually dependent.

Merely observing a particle influences its behavior. Thus, the world of subatomic particles, which is the foundation of our world, exists only within a network of relationships, both near and far. The notion of them existing in an isolated way, cut off from everything else, is narrow-minded and out of date. This hints at the theory of quantum entanglement, which was scoffed at by Albert Einstein, who called it *spukhafte Fernwirkung*, or “spooky action at a distance.”[3] Entanglement is a term that Erwin Schrodinger used when translating the term *Verschrankung* in a letter written to Einstein. It describes the mutual relationship that remains between two particles that interact after they separate, even at large distances. This relationship between two particles, close together and far apart, becomes the jumping off point from classical to quantum mechanics.

There are many similarities between the world of quantum mechanics and the world of the self. The ego also only exists in mutual dependence, primarily with the body and mind[4]. Of course there are social relationships and relationships with the world. The ego is not separate from the body and the mind, but exists as a network of relationships, primarily with the body and mind. Being a nexus of relationships, the ego cannot be a solitary, independent entity. Rather, it is only a network of dynamic interconnections. Without the body and the mind there would be no ego. And without the ego, there would be no body and no mind. Thus, the ego exists as a relationship and cannot be an independent entity. It must be relative. Thinking that our ego is independent, unchanging, solitary and cut off from others and the world doesn’t make sense, just as it doesn’t make sense on the subatomic level. Yet this is how the ego appears and feels. This is how we mistakenly perceive our self. Unknowingly, we live shrouded in deception.

An independent and unchanging ego would be inert as if it existed in a timeless, frozen, glacier-like world, cut off from everything else. Thus, our perception must be false. Based on this error of perception and thinking, we artificially divide the world into two solid, three-dimensional camps of friends and enemies. Our world becomes one of conflict, pitting us against them. We frame the world into those who are kind to us and those who appear as threats. Based on this misunderstanding, we create a world of conflict. This leads to fear and suspicion, which in turn leads to mistrust. Yet this world of conflict is simply fabricated by our mind. None of it is real. Our perceived ego is like an image in a dream when we wake up. It is like the water in a mirage when we approach closer. It is like a reflection of a face in the mirror that looks so real until we check behind the mirror.



Barry Kerzin
"Guided Death of the Ego Meditation"

9:28 min

Interdependence

To truly possess wisdom, one must have the knowledge of interdependence. There are several levels of subtlety. Primarily it means that our own happiness is tied to others. Thus, caring for others becomes an important method of caring for ourselves. Interdependence is also a significant characteristic governing our world, as we have mentioned before. This is seen in many fields. In global finance and economics, interdependence is very important. In this age of globalization, with the world getting smaller and more dependent, interdependence plays a pivotal role. In the natural world, interdependence is the means for things to change. Evolution of species is highly dependent





on complex inter-relationships. In the field of biology, food chains and symbiosis are based on interdependence. Climate change affecting regions far apart is another system based on interdependence. In the field of physics, subtleties of nature, the theories of quantum entanglement and the general theory of relativity are based on interdependence. Einstein's general theory of relativity explains the relationship between gravity and space time. Interdependence is also fundamental to the understanding of the origin of the universe. All these various systems and fields require interdependence for their functioning. Recognizing that relations of mutual dependence characterize so many aspects of our life moves us towards a more realistic understanding of the world we live in. It also helps us better negotiate our own place in this complex world. This kind of understanding is a strong catalyst to cultivate compassion, as it is more in tune with reality. Recognizing interdependence reduces our selfishness, thereby enhancing our compassion. Understanding interdependence gives us the panoramic view required to see the whole situation clearly. This allows us better decision making.

Usually, we are wrapped up in our own feelings. Feelings of hurt take center stage. We rarely move beyond our feelings and try to understand the feelings of the other person who has harmed us. What are the circumstances in their life that led them to become a bully? And what are the consequences for them of bullying others? If the other person were happy, there would be no reason for them to act in a hostile manner towards me. So what difficulties are they facing? By thinking from this panoramic perspective, more understanding and compassion naturally arise. This wider perspective based on the understanding of interdependence is more balanced, offering a more complete picture. As self-centeredness reduces, more humility arises. And compassion is automatically enhanced, like a balance scale. In this way, understanding interdependence increases our compassion.

Wisdom

This illustrates the very important role played by wisdom. Examining the ego thoroughly becomes an important method of cultivating deeper, unbiased, universal compassion. This universal compassion is not based on others' response to us. It is not "If they are kind, I will be kind; and if they are mean, I will be mean". Rather, it is based on a more detached, thoughtful attitude from our inner mental consciousness. Detachment frees us from taking things personally. It gives us the freedom to act in an unbiased way. This is cultivated through wisdom. A detached attitude allows our compassion to spread out further to more and more people. Eventually, our compassion will spread to everyone equally. This is what is meant by great compassion. Great refers to the number of those receiving our compassion, which eventually becomes almost limitless. At least, our attitude is one of supporting everyone.

Everyone wants to be happy. No one wants pain. Recognizing repeatedly this similarity we share with others brings us closer to them. We feel a shared humanity. At a deep level, we understand we are all the same. Regardless of whether we are a man or a woman, young or old, or have other differences, we all share this deep sameness of wanting to be well and not wanting to hurt. We become a member of the large human family. No matter whether this person is a friend, stranger, or even an enemy, they will all feel like new friends.

Adopting a wider perspective gives us the emotional space to distance our self from feelings of anger. Having emotional space, we learn not to identify with the anger. We can just let the feeling of anger go without clutching on to it as mine. We simply imagine the anger floating away like a cloud drifting naturally across the sky. There is no need to identify with the anger as "me" or "mine."

When people harm us in some way, it is helpful to recall that a vast array of factors have

contributed to their behavior. This is the practice of wisdom; adopting a broad perspective on the situation. When we face aggression or disrespect, it is worth considering why the aggressive or disrespectful people are acting that way. Very likely their behavior reflects difficulties they themselves are experiencing. This could also reflect difficulties from their past. For example, they may be harboring dysfunctional family-of-origin issues. Often, dysfunctional strategies adopted during childhood, when trying to cope with unhealthy family dynamics, stay with us like a rotten apple at the bottom of the barrel. This rotten apple spoils all the healthy apples nearby. These dysfunctional strategies often go unnoticed throughout our lives, although they often create turbulence beneath the surface. This can manifest as irritability, depression, sadness, anger or other negative moods. These influence our relationships throughout life. Similar emotional response patterns based on childhood dysfunctional strategies seem to surface again and again. Recognizing these can modulate our instinct for revenge. That other person is not actually my older brother who bullied me when I was young, even though it feels similar. Furthermore, understanding similar negative family influences and difficulties in the perpetrator makes it easier for us to understand the person that harmed us. Through understanding, we are more able to forbear and forgive.

The function of the unique Buddhist wisdom is to lead us beyond our illusions of reality. Buddhist wisdom shows us the way to break our chronic habits of distorting and misperceiving reality. Due to strong self-grasping and strong self-cherishing, we cling to a distorted view of reality. So the ego becomes narcissistic. It feels like it is the center of the world. Actually we are a 'blip' within infinite universes embedded in infinite time! Self-grasping means identifying and clinging to a distorted perception, thinking it is real. This is especially true of our ego. We grasp it so tightly that we identify with this distorted perception of our ego as if it were our self[5]. Wisdom breaks through the world of illusion. Understanding brings freedom. Uniting wisdom with compassion broadens our compassion. It deepens our ability to help others find happiness. This key of wisdom unlocks the door to happiness. Self-cherishing is self-centered and selfish. It is narcissistic, thinking we are the center of the world and that the whole world revolves around "me, me, me." We all fall into this narrow mindset much of the time. We get trapped in this ingrained habit. Certainly I do. It takes work to free our self from this strong preconception. Sometimes we are thinking about the welfare of others. But usually we are taking care of number one. We spend an inordinate amount of time thinking about our own needs. We get trapped in this narrow-minded attitude. Trying to find more happiness actually leads to more dissatisfaction.

The opposite of self-cherishing does not mean neglecting ourselves. Rather, it means adopting a wider perspective, recognizing the needs of others, thereby ensuring our own happiness. By focusing on the hopes and needs of others, an attitudinal paradigm shift takes place. We begin deeply taking care of ourselves. By helping others and being concerned about others, we also reap the benefit. We feel more relaxed, open and peaceful. A sense of meaning fills our life. We feel happy and more content. The recipient of our compassion also feels good.

Letting go of self-grasping is profound. Letting go of distorted perceptions brings a freedom that is delicious[6]. All our perceptions, thoughts and feelings are merely fabrications projected by our mind. Letting go of self-grasping brings us in line with how things actually are. This reality is much softer and gentler. It feels intricately interwoven. The world becomes systems of relationships. Everything feels balanced and joyous. It is the reality of interdependence. Emptiness means interdependence. Both reject the notion of a reality that is unchanging and independent. Both accept a reality that views everything as existing solely in relationship, only in dependence on other things. This understanding is shared by modern quantum physics. Both quantum physics and Buddhist science understand reality to be interdependent. There is nothing more than that. There are no solid entities. There are only relationships. Everything in the universe, subatomic world and

our selves exists that way. Still, understanding interdependence is not practicing and realizing it. The *sine qua non* for realizing interdependence is our behavior. We become patient, loving and kind. A new sense of courage and strength overtakes us. Life becomes meaningful.

A strong sense of ego separates us from others. It creates an “us versus them” life struggle. The wisdom of interdependence reconnects us with others. Life’s struggles transform into joy and meaning. Conflict and anger evaporate. Jealousy and competitiveness disappear. Our hearts open. Everyone we meet feels like a new friend. Mutual respect and trust blossom. Genuine friendship replaces artificiality. Everything hums with joy.

Understanding and practicing wisdom is a lifelong endeavor. With it comes newfound love and compassion. Wisdom and compassion are two sides of the same coin. Both lead us, as well as others, to rich meaningful lives.

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Further Reading

Beginner / Intermediate

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Advanced

Hopkins, Jeffrey (1983, 1996). *Mediation on emptiness*. Somerville, MA: Wisdom Publications.

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Chapter 10

A Cognitive Neuroscience Perspective

The ReSource Model

Compassion can be conceived as an emotional and motivational state or as an attitude to life

Within the broad notion of compassion, we can distinguish attentional, cognitive and socio-affective processes

Each of these psychological processes is based on specific neuronal networks

Boris
Bornemann



Tania
Singer



The ReSource Model of Compassion

The goal of this chapter is to take the perspective of psychology and neuroscience to elucidate the nature of compassion. More specifically, we aim at identifying the cognitive, motivational and socio-affective processes that constitute compassion as well as their neuronal bases.

To this end, we first need to define compassion. We distinguish here between two notions of compassion: a *narrow notion* of compassion as an emotion and motivation and a *broader notion* of compassion as a way of being, that is, an approach to reality and attitude to life.

Compassion as an Emotion and Motivation

In an earlier work, we adopted common definitions of compassion and defined it as a “deep awareness of the suffering of another coupled with the wish to relieve it”[1]. Other authors[2] have defined it similarly as “the feeling that arises in witnessing another’s suffering and that motivates a subsequent desire to help”. Compassion in this understanding is thus both an emotion (a feeling of concern) and a motivation (the will to alleviate suffering). It is a fleeting state, rather than an enduring way of being or attitude to life.

Compassion as a Way of Being or Attitude to Life

The view that compassion is a particular approach to reality or attitude to life rather than a affective-motivational state is in line with contemplative notions of compassion. As, for example, Dreyfus[3] discusses, in Buddhism, compassion is understood as a mental factor, that is, a certain constitution of the mind, which can be developed or cultivated. This constitution *may* lead to emotions in response to somebody else’s suffering or joy, but it doesn’t have to. Dreyfus distinguishes between individuals that are beginners and those that are advanced in the cultivation of compassion and describes that “only the former seem to exhibit the kind of psychological and somatic characteristics that we usually associate with emotions”.

“[...] [Beginners] are often described as being overwhelmed by compassion. They can be deeply moved by compassion and sometimes cry. [...] Such an emotion is positive in that it does not disturb the peace of the mind, but it does arouse the mind. As [...] [they] progress, however, their compassion seems to change. It is less emotional in the usual sense of the word. Such compassion is described as being equanimous. It is very strong, even stronger than that of [...] [the beginner], but it is more balanced and does not lead to the kind of emotional outburst mentioned previously.” (p. 43)

In a dialog with the Dalai Lama, Ekman[4] also defends the view that compassion should not be conceptualized as an emotion, saying that “compassion needs to be cultivated while emotions do not”, “compassion once cultivated is an enduring feature of the person while emotions come and go” and that “compassion does not distort our perception of reality, while emotions do” (p. 141).

It is this understanding of compassion – as a mental disposition rather than an emotion – that is discussed in most contributions of this book (e.g., [Halifax’ model of compassion](#) as compounded of emotional, cognitive, attentional and somatic subprocesses; also see [chapter 18](#), [chapter 8](#), [chapter 9](#)). There are many ways to dissect this broader concept into subcomponents, all of which have their justification with regard to certain purposes. Our model, which we will present in the

next paragraphs, was developed to form the basis for the cultivation of compassion in the broader sense and make it accessible to the scientific study within psychology and neuroscience.

The ReSource Model of Compassion

The ReSource model was developed to operate as a framework for a European-funded longitudinal study on compassion training led by Tania Singer and her team (see [Box V](#) for details on the training protocol). The name “ReSource” implies that the cultivation of compassion entails a build-up of resources in various domains (e.g., cognitive, affective, motivational, social). At the same time, rather than acquiring completely new skills, cultivation is understood as a process through which we tap into qualities and dispositions that are already present (which could collectively be referred to as the “source”; also see [Preface of section 1](#)).

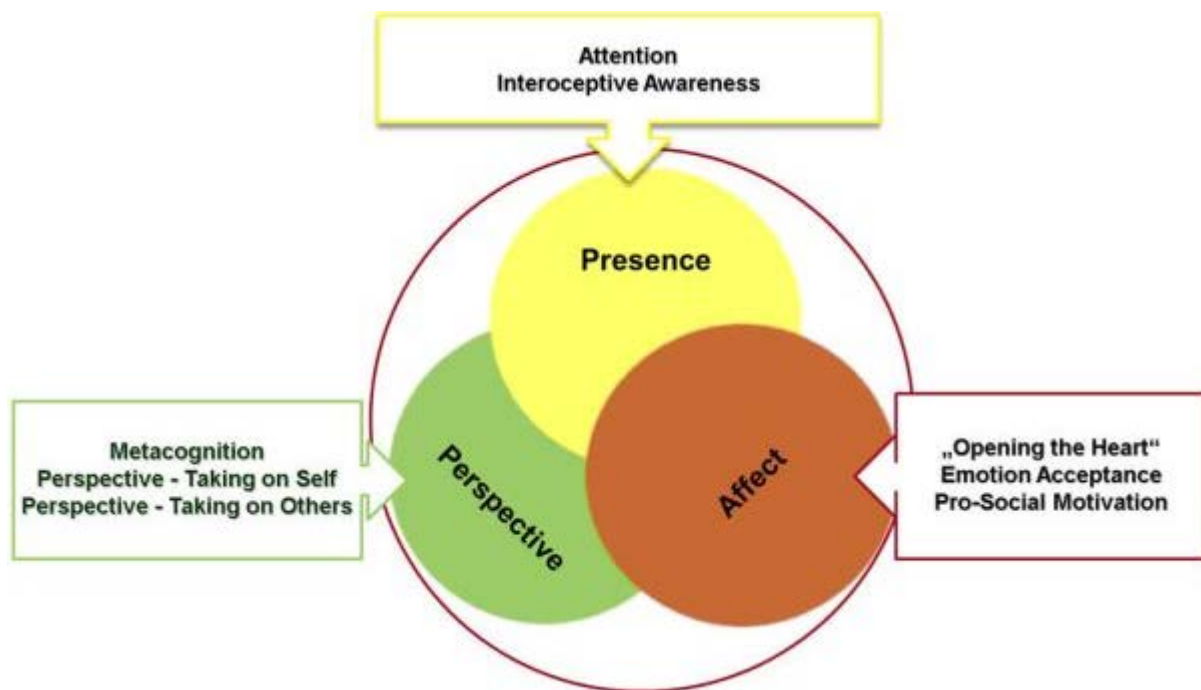


Figure 1: The ReSource Model of Compassion

A first important distinction that the model (Figure 1) makes is that between affective and cognitive aspects of compassion. The *affective* domain comprises various skills and dispositions of handling difficult emotions, of generating feelings of love, warmth and benevolence, as well as prosocial motivations. The cognitive domain is termed “*perspective*” in the model because it refers to the abilities to assume a certain observational perspective on thoughts (metacognition), to be aware of the different aspects of “self” and shift between these aspects at will, and to take the perspectives of other people. As will become clear throughout the description of the model, these different domains rely on different neuro-cognitive systems, making the distinction not only conceptually but also biologically plausible.

A precondition for cultivating these two crucial aspects of compassion is the ability to stabilize the mind, an ability associated with attentional faculties, as well as learning to turn the focus from external events to internal mental events (introspection) and bodily events (interoception). In the model, we refer to these characteristics collectively as “*presence*”, as one goal of this preparatory phase is to sharpen our attention to what is happening in the present moment rather than to the past or future.

In the following sections, we will describe these three broad categories – presence, affect and

perspective – in more detail. We will explain their role within compassion, their subcomponents, and how those relate to concepts and findings from psychology and neuroscience (see [Table 1](#) for an overview).

Presence

There is a general consensus throughout many contemplative traditions that the basis for a fulfilled and compassionate life is the ability to attend fully to the present moment[5]. Recent findings from modern psychology have validated this ancient notion. For instance, in a study[6] with 2250 adults in the US, participants were frequently contacted through a smartphone app to assess what they were doing, how they were feeling and what was on their mind. Unsurprisingly, participants were happier when thinking about positive than about negative events. They were, however, happiest when they were fully immersed in what they were doing, that is, not mind-wandering at all.

Thinking about something that is not present is clearly necessary and beneficial in some situations (e.g., when planning for the future[7]). However, with regard to both our own happiness and our availability to the outside world, it seems desirable to have the ability of adjusting the extent to which we do so. The capacity of being aware of the current situation and bringing our mind back to the present moment at will can be analyzed into two subcomponents, *attention* and *interoceptive awareness*.

Attention

Being fully present implies voluntarily directing our attention to the situation at hand and sustaining it there. When attention has strayed from the object at hand, a neuro-cognitive function has to detect and resolve the resulting conflict between the intended and the actual mind activity. This function has been called *conflict resolution*, and critically involves the anterior cingulate cortex and the dorsolateral prefrontal cortex[9]. When attention has to be sustained over longer periods of time, cognitive psychologists speak of *vigilant attention*. It is supported by a predominantly right hemispheric fronto-parietal network (particularly anterior cingulate gyrus, right dorsolateral prefrontal cortex, inferior parietal lobule), in conjunction with brain sites such as the locus coeruleus and the thalamus, which are critical for maintaining the alert state of the organism[10]. Recognizing whether our mind is on the situation at hand or rather preoccupied with thinking requires a function that has been dubbed *monitoring* in cognitive psychology and found to be crucially supported by the anterior prefrontal cortex (Brodmann Area 10)[8].

Interoceptive Awareness

Interoceptive awareness is the ability to perceive the internal state of the body. This can refer to activity of the inner organs, the breath, muscle tension and so forth[11]. Tuning into the signals of the body is helpful in making us present, because unlike thoughts, which can relate to the past or the future and to distant places, body signals always occur in the here and now. In the context of compassion, internal body awareness plays another important role: it lays the foundation for the recognition of feelings in ourselves and others.

Table 1: Components of Compassion, their Cognitive and Neuronal Correlates

| Facet | functions in the cultivation of compassion | psychological processes/ constructs | key neuronal correlates |
|-------------|---|--|---|
| Presence | attention <ul style="list-style-type: none"> precondition for the intentional cultivation of mind states, e.g., through meditation return to the present moment maintain stability and clarity of mind | conflict resolution and directing attention vigilant or sustained attention monitoring | anterior cingulate cortex, dorsolateral prefrontal cortex anterior cingulate regions, right dorsolateral prefrontal cortex, inferior parietal lobule; locus coeruleus; thalamus anterior prefrontal cortex (BA10) |
| | interoceptive awareness (body awareness) <ul style="list-style-type: none"> be anchored in the present moment (body sensations are always "present") keep "in touch" with internal signals, e.g., emotions of self and other | interoceptive (bodily) awareness | insula cortex |
| Affect | opening the heart <ul style="list-style-type: none"> turning towards oneself and others in benevolent, warm and constructive ways | caring, affiliation, attachment, love | bed nucleus of the stria terminalis, preoptic area, periaqueductal gray, ventral tegmental area, ventral striatum, anterior cingulate, medial orbitofrontal cortex |
| | accepting and soothing difficult emotions <ul style="list-style-type: none"> transform negative emotions working with obstacles blocking compassion | exposure, extinction and reconsolidation; re-conditioning | to be explored |
| | prosocial motivation <ul style="list-style-type: none"> engage in prosocial actions sustain cooperation | approach motivation, other-related goals, altruistic preferences action preparation | globus pallidus motor areas (e.g., precentral gyri) |
| Perspective | metacognition <ul style="list-style-type: none"> become aware of mind processes detach and de-identify from thoughts to allow greater flexibility in successive emotions and behaviors | <i>classical understanding:</i> knowing about knowing; thinking about thinking <i>"2nd order" monitoring:</i> cognitive defusion, de-identification, monitoring | anterior prefrontal cortex (BA10) to be explored |
| | perspectives on self <ul style="list-style-type: none"> become aware of the construction of self and aspects of self / non-self gain greater flexibility with regard to self-construals connecting with healthy notions of self | interdependent self-construal; higher self-complexity reduced narcissism | medial prefrontal cortex, temporo-parietal junction; precuneus; posterior cingulate reduced activity in cortical midline structures; more empathy-related activation (e.g., anterior insula) |
| | perspectives on others <ul style="list-style-type: none"> detaching from self to an other-related perspective better understanding of other peoples' thoughts, motives and emotions | theory of mind or cognitive perspective-taking overcoming egocentricity bias | temporo-parietal junction; medial prefrontal cortex; precuneus; posterior cingulate more frequent activation of this network |

Feedback from the body is processed in the insula[12], a brain region tucked away deeply in the lateral sulcus, between the temporal and the frontal lobes. This region is also activated during the experience of emotion[12]. People who have difficulty identifying their own emotions show reduced activity in the insula[13] (the "interoceptive cortex"). Intriguingly, interoceptive awareness is also positively correlated to the ability of perceiving emotions in others. The better people are at perceiving their own bodily sensations, the more accurate their judgments about other people's emotions will be[14]. Neurologically, it is again the insula that we find activated when people empathize with the suffering of others[12].

We have thus good reason to believe that being aware of body sensations will not only help us to

be more present with what is actually happening at any given moment, but also increase the awareness of our own emotions and those of others – two abilities that are fundamental to compassion (also see [chapter 15](#) for the neurological underpinnings of empathy and compassion).

Affect

Within the affective domain of the ReSource model we distinguish between three skills that are crucial to compassion: generating feelings of benevolence and warmth; accepting and being with difficult emotions; and generating prosocial motivation.

Opening the Heart: Generating Feelings of Benevolence

An important aspect of compassion is the ability of an individual to generate or open to feelings of love, warmth and benevolence towards oneself and others. This ability is probably rooted in biological systems that phylogenetically evolved for the care of offspring (“care system”[15] or “affiliative system”[16]). Mechanisms in this system assure that the care of offspring is intrinsically rewarding. The neurochemical bases of these affiliative and caring systems are associated with the release of dopamine, oxytocin and endogenous opiates that induce states of reward and quiescence in the care-giver[16],[17] (also see [chapter 13](#), [chapter 7](#), [chapter 15](#)).

Naturally, the care system is particularly developed in primates where intensive and sustained care-giving behavior is required over much longer stretches of time than in other species. This system forms the basis for what has been termed “attachment” in developmental psychology[18], that is, an intimate affective bond between the care-giver and the infant. Later, this system is involved in forming and maintaining affective bonds between romantic partners[19]. It can also generalize to friends or even strangers, such that we may experience feelings of connectedness, feelings of trust, warmth and benevolence towards them or in turn feel soothed by their presence[20]. When we speak of opening the heart, or generating feelings of benevolence, we mean tapping into these innate systems that dispose us to care for others, accompanied by a feeling of warmth, love and connectedness that is in itself rewarding.

Neurologically, Panksepp has implied the anterior cingulate, the bed nucleus of the stria terminalis, the preoptic area, and the periaqueductal gray to be constituent of the mammalian care system[15]. As [Klimecki, Ricard and Singer](#) discuss in this volume, the voluntary generation of feelings of warmth and benevolence in humans may activate additional areas (medial orbitofrontal cortex, striatum, ventral tegmental area/substantia nigra, and globus pallidus) which have previously been associated with affiliation, love and reward.

Accepting and Being With Difficult Emotions

Classical psychological literature on emotion regulation[21] describes various strategies to downregulate negative emotions, such as distraction, suppression and reinterpretation. In the face of somebody else’s suffering these strategies may seem unethical, as they are likely to reduce our propensity to help. Also, in the face of our own suffering they may counteract our desire to be fully present with reality and reduce our ability to constructively approach the roots of our suffering. A compassionate way of coping with difficult emotions thus takes a different approach: it aims at mindfully perceiving and accepting the emotion and turn towards it with an attitude of curiosity and care. Hölzel and colleagues have proposed that the processes accompanying accepting, non-reactive awareness of an emotion can be described in terms of cognitive-behavioral therapy as exposure, extinction and reconsolidation[22]. When an organism stays with a negative emotion (exposure) without reacting and while observing the actual consequences of the eliciting event, it





can adjust its emotional reactivity, leading to a new and more adaptive response pattern (reconsolidation) or even to extinction of the response. The proliferation of the negative emotion and its distressing effects may be further attenuated when the care system of the organism (see above) is activated and directed towards oneself, serving as a safety signal while processing the negative stimulus (as in self-compassion, see Neff & Germer, [chapter 16](#)).

Prosocial Motivation

The care system[15],[16] entails pathways that are directly linked to action: Besides the opioids that induce feelings of warmth and quiescence in the care-giver, particularly after care has been given, it also uses the neurotransmitter dopamine (e.g., through release in the ventral tegmental area and connections to the seeking system[23]), which is the hallmark of goal-directed motivation and behavior[24]. In line with the affective and motivational tone of the care system, these actions will be directed towards nurturing others. Accordingly, after one week of daily loving-kindness meditation, subjects have been shown to exhibit more prosocial behavior in a standardized game situation that allows the measurement of different types of helping behavior (see [chapter 15](#)). When experienced meditators engage in loving-kindness meditation[25], it has been shown that this leads to activation in motor areas (pre-central gyri and posterior medial frontal cortex), which is indicative of action preparation. This speaks to the idea that prosocial motivations and a readiness to act are integral features of compassion, coming as part and parcel of a general attitude towards life that seeks to alleviate suffering.

Perspective

This more cognitive domain of the ReSource model could be related to the “wisdom”, “insight” or “view” aspects of Buddhist philosophy (see [chapter 9](#)). We call this part “perspective” because all subcomponents essentially require the individual to take perspectives on the internal or external world. Specifically, we conceptualize the part as comprised of three subprocesses, namely metacognition (taking a specific perspective on one’s own mental processes and thoughts), perspective-taking on self, and taking the perspectives of others. A common underlying characteristic of these subprocesses is that they require the ability to gain a certain distance to events and add “fluidity” to the cognitive system: they require the individual to detach from what seems to be reality at a given moment and assume an alternative perspective.

Metacognition

Metacognition, in cognitive psychology, is generally understood as “knowing about knowing” or “thinking about thinking” or as being aware of our cognitive processes and states[26]. Our understanding of metacognition in the context of the ReSource model includes this skill, but goes beyond it. When we speak of metacognition we mean being aware of the process of thinking itself and assuming a certain perspective on it. Thoughts are observed as “natural events” within ourselves, contextualized among other inner or outer events (e.g., feelings, body sensations, people around us). Thoughts are not seen as identical with “who we are”, but rather as fleeting mental events (de-identification). This way of relating to thoughts has also been termed “cognitive defusion”[27] because it breaks up the fusion, or automatic coupling, between the arising of a thought and its consequences within the organism (e.g., successive thoughts, emotions, action preparation). It has been linked to symptom reduction in a variety of psychological disorders[27].

The neural basis of monitoring thoughts involves, among others, the anterior prefrontal cortex/BA10[8]. Metacognition in the sense of cognitive defusion, contextualization and de-identification from thoughts will probably involve the same areas but also additional activation

patterns that are related to the decoupling of thinking from immediate self-related processing, emotional reactions or action preparation[28]. More research is needed to elucidate these patterns.

Perspective-Taking on Self

Many contemplative traditions question the notion of a self as an independent, unified and enduring entity. Modern neuroscience has joined in this skepticism towards such a “self-entity”, showing that there is no “self-center” in the brain, but that the feeling of self is brought about by the interplay of many widely distributed brain regions[29]. This notion is not only theoretically interesting, but when thoroughly understood and internalized can have significant consequences for the way we perceive ourselves and others in everyday life (“self-construal”[30]). We may become more aware of the impact that other people have on our thoughts and feelings (interdependent self-construal), which is associated with closer relationships and more prosocial behavior[31]. Observing the change and the variety within may also lead to a more diverse self-image (“self-complexity”), which has been found to serve as a buffer against stress-related diseases and depression[32]. Moreover, such a perspective may help reduce over-identification with certain self-aspects. Less rigidity and more humor with regard to the “self” may help to counteract the increase in egoism and narcissism in our society[33] that is associated with a concomitant increase in depression and burn-out rate[34], resulting from excessive demands and expectations towards the self and high levels of self-criticism (also see [chapter 3](#)).

On the neuronal level, reflections about the self, the retrieval of autobiographic memories or the processing of self-relevant stimuli all engage cortical midline structures[29]. Important to the skill described here, however, is the ability to decouple from a certain activated inner role and switch to another one; an activity that is likely to be subserved by the temporo-parietal junction, together with other structures[28] that are activated when we try to take somebody else’s perspective (e.g., precuneus, medial prefrontal cortex).

Taking the Perspective of Others

This skill refers to our ability to understand other people’s mental states, such as beliefs, thoughts, intentions or views. This ability has been termed theory of mind, mentalizing or cognitive perspective-taking[28]. This rather cognitive route of social cognition has been distinguished from the previously mentioned affective route to the understanding of others, which includes phenomena such as emotion contagion, empathy or compassion[12]. Whereas the affective route always includes the presence of a vicarious feeling state, cognitive perspective-taking does not entail much feeling but consists of “cold” cognitive processes. These processes are particularly important when the other is so different from ourselves (e.g., somebody of different age, culture and gender) that a pure projection of our own affective states onto the other would result in misattribution and egocentric biases.

The brain systems subserving this kind of reasoning have been intensively studied and include the medial prefrontal cortex, the temporo-parietal junction, the precuneus and the posterior cingulate[12],[28].

The ability and inclination to step into somebody else’s shoes may reduce a cognitive distortion that has been termed the “egocentric bias” and refers to the inability of subjects to detach from their own experience or views when inferring what others may feel, think or value[35]. Thus, perspective-taking on others may lead to encounters in which both sides more accurately understand each other’s needs and concerns, resulting in interactions that are more satisfying and profitable.

Conclusion

In this chapter, we have adopted a cognitive-affective neuroscience perspective on compassion. We have distinguished a narrow notion of compassion as a fleeting emotional-motivational state from a broader notion of compassion as an attitude to life. We have decomposed compassion as an attitude to life into subprocesses that fall into three domains: presence, affect and perspective. Presence forms the foundation for the skills and dispositions of the other domains. It comprises attentional control and stability as well as internal bodily awareness (interoception) and is subserved by fronto-parietal networks and the insula. The other two domains divide compassion-related skills and dispositions into cognitive (perspective) and emotional (affect) processes. This follows the division of their underlying brain circuitries: whereas metacognitive and cognitive perspective-taking processes on the self and others are associated with late-developing frontal and parietal brain regions (e.g., medial prefrontal cortex, temporo-parietal junction, precuneus) the socio-affective processes associated with prosocial motivation, positive affect, affiliation, benevolence and emotional awareness are rather rooted in old motivational systems associated with functions of the somatosensory, interoceptive and limbic cortices that develop early in life[12].

Compassion research is in its very early days. Future conceptual and empirical work will have to further delineate the subcomponents of compassion and their underlying neuronal and neuro-endocrinological systems. We hope that this research can be guided by and will in turn help to refine the rough framework outlined in this short chapter.

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Chapter 11

Kindness and Compassion as Integral to Mindfulness

Experiencing the Knowable in a Special Way

Western psychology and neuroscience has recently shown great interest in examining and adopting elements of Buddhist psychology, such as mindfulness and compassion practices

Kindness and compassion are integral to mindful awareness

Understanding what mindfulness is requires experiencing what mindfulness is

Paul
Grossman



Kindness and Compassion as Integral to Mindfulness

If you mysteriously happened to light upon this particular paper out of the enormous, overwhelming, mind-boggling plethora of recently written commodities about happiness, consciousness, mindfulness or compassion, you might – just maybe – be willing to begin the reading by first taking part in a very brief and very personal experiment involving the mind, the body and the proverbial heart. It is an imperfect, completely unsatisfactory little exercise, as so much of our lives and experiences is imperfect and less than satisfactory (still we continue to go on, often simultaneously or alternately, feeling both appreciation and disappointment). Nevertheless, this little experiment is the only way I know to convey a glimmer of sense about something that really has to be experienced before it is talked about or even named – even though this necessity is rarely acknowledged. So let's start (you may want to turn on the audio version of this exercise and continue reading later).

A Personal Experiment



Paul Grossman
"A Personal Experiment"

19:17 min

Let's begin by making sure you are sitting comfortably in a position that you think you are able to maintain for a little while – notice the angle of your back, how your head is sitting on your shoulders, whether your arms, legs, feet and hands are loose and relaxed, or cramped and tight. Make any adjustments that give you the feeling you are more at ease and comfortable, that all the different parts of your body are as relaxed as can be.

Now take a couple of deep breaths and notice the spot where you feel the flow of air entering and exiting the body most completely. It may be at the nostrils, somewhere in your abdomen or your chest. Look for a spot where you think you can best rest your attention in order to make contact with the flow of life that the breath really, truly constitutes. When you have found a more-or-less satisfactory spot, stop consciously making your breathing deeper or slower, and let the breath take its natural course. This means we let the breath do its own thing just like it has for the many decades before this moment. You may or may not have paid much attention to your breath before. Nevertheless, right now, we are intentionally, voluntarily examining the breath – as close up as we can come to feeling the sensations of the in- and the out-breath – as they naturally flow without us trying in any way to "improve" our breathing.

So – as best you can – notice the sensations that arise at the spot you have chosen at each moment that the breath changes – throughout the period of breathing in, the transition from in-breath to out-breath, the flow during expiration and the shifting from expiration to inspiration. And





just continue this process of noticing from breath to breath how it feels. . . .

Are you still with me, or did your attention already fly away and alight on some other thing? No matter, if this has happened and you still want to remain with this little exercise, just make the briefest of mental notes about what just distracted you and return to the sensations of the breath. Should you be like almost everyone else, you may have already noticed that your attention quickly shifts and wavers, and that it is not very long before you are once again someplace very different from the spot where you are in close contact with your vital process of breathing. The distractions may happen somewhere in the middle of the first breath, or – if you have especially good powers of concentration – it may take 3 or 4 breaths before you find your attention somewhere else.

Maybe you notice some frustration bubbling up as you repeatedly try to redirect your attention back to the breath, only to find the mind wandering away once again before you can even complete the next breath. Maybe the thought arises, I am lousy at this, or this is a really stupid exercise; what nonsense to watch my breathing anyhow; it's done fine without me all these years. Or maybe you find yourself capable of following the physical sensations of the breath rather continuously for a little while only to feel that the breath is actually quite uncomfortable – too tight, too short, too irregular, too this or too that. On the other hand, maybe you can follow the breath for a while and feel a deep sense of relaxation and the desire to hold on to it because it feels so good, only once again for the mind unexpectedly to wander someplace else or the positive feeling to somehow dissolve or transform into some less comfortable perception, like discomfort, tedium or boredom.

Now humor this writer for a few minutes longer and continue this exercise – as best you can. But this time, allow yourself (also merely as well as you can) to let even any unpleasant distractions, thoughts and feelings just be – as the natural states of the mind and the body that sometimes arise – since they are, anyhow, there, whether we like them or not. Whatever is going on in the moment, gently retain awareness of each instant of your breathing as best you can, and bring the mind back to the breath each time you notice it straying. Realize that at this very moment, whatever you are feeling, perceiving or thinking, it is as good as it gets: you can't change what has already happened. It may be more pleasant than the previous moment, it may be less pleasant, but right now we are sitting with what is. We can either investigate it, examine it from all sides, try to penetrate the inner substance of our breathing experience by being open, patient and tolerant with it (to whatever degree that is possible for us in this particular moment), or we can turn away from the experience, attempt to flee it, by escaping into other perceptions, images, thoughts of past, present or future that obscure or camouflage the immediate experience of our breathing.

So, provided you still are willing, try for just a little while longer to stay closely in contact with each moment of your breathing by applying whatever amount of patience, kindness, tolerance and generosity you currently have at your disposal, aiming your attention at whatever surfaces during the process – attempting to apply kindness and patience to the wandering mind, tolerance and openness to any discomfort, boredom or withdrawal from calm, relaxing sensations. And notice if the quality of your paying attention to the breath changes in any way – even whether for the briefest moments you might be able to let go of the impatience, judgments and self-criticism that arise during this “simple” mind-body experiment of attending to the sensations of the breath. . . . Perhaps you become aware of a few fleeting moments in which your powers of concentration, attention and investigation are in harmony with a state of ease and receptiveness. Or perhaps, you only are aware of an increasingly seething impatience with this little exercise. But even in the latter case, maybe it is possible for you just to let this discomfort go for a moment or two, and to

kindly and curiously examine how even this discomfort feels? Ah, discomfort feels like this; pleasant sensations feel like that.

Now gently return to this text as your object of attention.

Possible Insights into What You Just Experienced

The purpose of this experiment was that you might be able to make very brief acquaintance with a particular way of experiencing the present moment – in this case paying attention to your breathing. Perhaps it may also illustrate that the act of paying attention in this special manner is neither simple nor just a matter of concentrating one's focus upon a particular object or phenomenon. To really pay attention means to settle ourselves in a calm environment in which we are not constantly distracted by thoughts, images, memories or emotions that pull us away from where we intend to look (see also [Box VI](#)). The development of this process requires exercising not only our powers of attention, but also our powers of openness and acceptance of what, at the moment, has, in fact, already occurred, and therefore we are unable to change. This process necessitates repeatedly returning to the object of attention when we realize we have strayed, which means – given the eternally wandering mind you may have just discovered – that we learn patience in the process.

This pertains not only to awareness of the breath. The breath, as the object of attention, is just a somewhat simplified microcosm of all aspects of perceptible experience[1]. The wavering and flightiness of our attention is rampant and applies not only to attending to our breath but to awareness of all aspects of our lives. In fact, if we have difficulty in being fully aware of a simple process like breathing, we might reflect upon what that suggests about our ability to be fully aware of more complex experience like attention to our work, our relationships, our environment.

Towards an Embodied Ethics of Attention, Experience and Understanding

The process, or practice, I have just described derives from a view of existence and a kind of psychology that is really quite different from the way we usually see things in the West, where cognitive processes of attention, orienting and awareness traditionally have rarely been connected to socioemotional qualities like kindness, generosity, compassion, courage or patience (see also [chapter 9](#)). In fact, these latter behavioral tendencies or qualities have only infrequently been seriously discussed or investigated in Western psychology (having, long ago, been relegated to religion or, perhaps worse, to sentimentality)! We are good at criticizing, and analyzing fame and blame, baser emotions like fear, angst and depression (see also [chapter 3](#)), but consideration of kindness and compassion as legitimate topics typically has often seemed just too softheaded (one might ask why?).

When oriented towards a general worldview, qualities such as kindness, tolerance and compassion, can actually be viewed as fundamentals of an ethical system that counters more popular and prevailing systems of moral values (e.g., moral values based upon religious imperatives, or societally rooted ideas like utilitarianism [conduct aimed at promoting greatest benefit for the greatest number of people], or the ethical egoism of Ayn Rand [which proposes individuals should maximize their own self-interest]). It is a system that may also be characterized as more grounded in immediate action and consequences, rather than the elaborated grand goals of other ethical orientations. Thus, kindness, compassion and generosity as ethical principles of behavior are supposed to supplant baser emotions that can develop in systems that embrace dichotomies of values, such as success vs. failure, praise vs. blame, fame vs. disrepute, and pleasure vs. pain.





The process I describe seamlessly combines the cognitive, the social and the emotional with ethical values in a way that – at least at first sight – is quite alien to our usual view of things: the cognitive, the socioemotional and the ethical are trained and exercised together, one reinforcing the other, in a literally embodied act in which we pay attention mentally, physically, emotionally and intentionally to what arises from moment to moment in the field of possible perception within our bodies[1],[2]. While we are learning powers of attention and concentration, we also are simultaneously cultivating our powers of courage, kindness and patience. Our very bodies and minds teach ourselves these things without any preaching, lecturing or other intervention: it's all happening within our own personal experience. We learn a new construction of experience and reality that almost completely derives from intimate subjective investigation of what we are able to perceive.

For want of a better word, we call this process mindfulness. ...And there the confusion begins.

This approach is directly derived from Buddhist psychology and meditation practice and has been labeled as mindfulness practice. In the late 1970s, Jon Kabat-Zinn ingeniously developed, packaged and implemented a program of mindfulness-based intervention for patients with chronic disorders, which he called mindfulness-based stress reduction (MBSR)[3]. In so doing, he put this kind of introspective psychology on the map in the West, although many teachers of insight meditation and Zen had long been paving the way.

In the last 10 years, things have really taken off with mindfulness in medicine and psychology. The practice of mindfulness, just over this short period, has been applied to almost every imaginable problem and disorder, from rehabilitation of imprisoned offenders to major depression to physical disorders like cancer and multiple sclerosis[4],[5]. Some scientists see hope for mindfulness in having a direct effect upon the progress of individual physical diseases, whereas others believe it can primarily be used to help people who suffer the existential consequences of serious disease or other dire vagaries of the human condition, in order that they may begin to create new perspectives and bring new meaning into lives that seem out of control. The rapid development of technologies that permit us to examine what is happening from moment to moment in the brain also allows some degree of verifiable and objective scientific confirmation that mindfulness really does have specific effects upon how minds work[6].

Whatever the potential benefits and physiological mechanisms, this new impetus means that it has now become legitimate for physicians and psychologists to study and talk about subjective experience and begin to investigate qualities like kindness and compassion. **However**, it also means that physicians, psychologists and researchers must try to make sense of mindfulness, when they often may have very little or no practical experience with it, and they may often believe that “mindfulness” can be understood and dealt with just like every other concept that has come along in their studies and careers: a popular new concept is thought to be quickly understood and is then integrated into a research plan. Hypotheses are subsequently formulated and tested among a group of research participants.

One very interesting thing about mindfulness, on the other hand, is that it very clearly works in an opposite direction: first, it's not a theory that requires testing with a group of research participants, but rather a systematic approach to investigate experience in a very personal, individual manner. The practice of mindfulness first examines what's going on without much of any real theoretical basis; the very primary process is intentional, intimate contact with whatever perceptible experience one can be aware of in the present moment. Then based upon that cumulative, highly personal, experience, the mind and body attempt to make sense of what has been attended to.

And – as pointed out previously – mindfulness practice is not merely some cognitive-behavioral method to develop attention, but rather an approach to develop a particular kind of attention. With the kind of mindfulness that originates in Buddhist psychology and mindfulness-based interventions (MBIs) derived from MBSR, it's not about learning to concentrate and observe events like a sniper might or like some training to pay better attention in daily life, in a cognitive psychological experiment or to the quick demands of a computer game. Mindfulness is a special kind of attention that can only occur when we turn towards whatever we are perceiving, without our emotions and intentions prejudiced or biased in the process – neither turning our attention away from the object of awareness, nor trying to hang on to or control it[7]. That is where the basic attitudes of kindness, openness, tolerance, patience and courage, spoken of earlier, prove essential to this special type of direct contact with our experience.

The mindfulness of Buddhist psychology and MBI, consequently, is seen to provide a unique approach to dealing with our unruly minds residing in unruly bodies in an essentially unruly world within an unruly universe. It is a method that trains the often unruly mind and body to be still and to open up to experience in a very intimate way. Because our minds often wander to uncomfortable places, like thoughts of regret, envy or fear – and our bodies also often go along, with tensing up, becoming overstimulated or, alternatively, lethargic, exhausted or painful – this particular kind of “mindful” experience can only happen when we can develop a certain level of patience, kindness and courage as we seek to still our minds and come into close, immediate contact with whatever we are able to feel from moment to moment.

This means we are not only teaching our minds to focus and maintain contact with whatever is going on in the present moment. We are also teaching our minds and bodies to apply the skills of kindness, patience, generosity and trust to a body and mind that are always, at least partially, beyond our own control: our minds wander and get restless; our bodies become ill, agitated or otherwise uncomfortable. However, by practicing mindfulness, we may still find ourselves somehow able not only to reside in our bodies and minds, but also able to value and even vividly and richly experience them, although they are, indeed, often unruly and unsatisfactory from a perspective of having things in a certain way.

The inner exploration and investigation of experience that characterizes mindfulness thus permits the development of a new set of insights into how things – both inside and out – work, and allows for a new set of values that replace negative criticism and aversive emotions with kindness, openness and tolerance to whatever there is that we are, for any reason, unable to change. And this all comes from simply paying attention in a particular kind of way. And it is the repeated experience of our own experience within our own bodies that may bring some new kind of understanding of how our minds and the world operate.

Western Psychology's Reinvention of Mindfulness

"When I use a word," Humpty Dumpty said in rather a scornful tone, "it means just what I choose it to mean — neither more nor less."

"The question is," said Alice, "whether you can make words mean so many different things."

"The question is," said Humpty Dumpty, "which is to be master— that's all."

from *Through the Looking Glass*, by Lewis Carroll





Unfortunately, qualities such as kindness, tolerance, patience, generosity and courage – inherently ethical and socioemotional in nature – are often ignored or neglected in contemporary psychologists' working definitions of mindfulness. One very popular definition, in fact, equates mindfulness with people's beliefs about how absent-minded or carelessly inattentive they feel themselves to be in everyday life[8]. People who report themselves to be carelessly inattentive are labeled as low in "mindfulness", whereas those who report themselves not to be inattentive or absent-minded in everyday life receive a high "mindfulness" rating. Such definitions of mindfulness seem a very long way from the kind of mindfulness at the foundation of Buddhist psychology, mindfulness-based interventions and associated research. These and other definitions of mindfulness not only create confusion, and distort and redefine mindfulness, but also threaten to corrupt the adoption, progress and development of mindfulness in Western psychology and medicine[9], [10], [11].

Because of academic psychology's affinity for counting things, such definitions are also used to create measures of mindfulness based upon respondents' self-reports. For example, people may rate themselves over 5 or 10 minutes, based upon statements within the questionnaires, on self-perceptions of inattentiveness. Researchers then make judgments – I would say erroneously – based on these brief self-ratings about the mindfulness of research participants. This assigning of degree of mindfulness takes place 1) without any real evidence even that perceptions match behavior (and there is a lot of evidence that there is a mismatch between actual behavior and self-perception when people are asked to assess themselves on positive attributes like courage and emotional self-control, so why should ability to pay attention be any different?), and 2) based upon a definition of mindfulness that is, at best, remotely related to the original Buddhist/MBI meaning of the term.

Assumptions that mindfulness can be and is measured by self-report questionnaires may create a serious additional problem: in research on personality and social psychology, questionnaires, rather than direct measures of behavior, have increasingly been relied upon as legitimate measures of psychological functioning over the last three decades[12]. About 50 years ago, 80% of personality and social psychological research was based on objective measures of behavior, whereas today, it seems that this is the case for less than 20% of studies; the other investigations primarily rely upon self-report questionnaire methods that are relatively inexpensive, quick and easy to gather data with. This means that questionnaire methods often come to define a phenomenon like "mindfulness" in psychology. In research studies and scientific meetings, respondents are then referred to as "more mindful" and "less mindful" people, solely on the basis of the answers they provide to, say, 16 brief statements that may ask participants about how poorly they think they pay attention during everyday life (e.g., whether they know where they end up when they go for a drive, or whether they forget people's names upon first being introduced)[8]. Later, when studies are reported in the popular press and other media, such characterizations of mindfulness become the general definition of the word.

Because such measures can, therefore, create their own reality – in a world where questionnaire data are often unquestioningly assumed to reflect actual fact and not merely self-perception – this can lead, and most likely appears already to have led, to a situation in which understandings of mindfulness and its broader implications are at dramatic variance with the original Buddhist and MBI connotations.

Additionally, definitions of mindfulness that emphasize attentional aspects – to the exclusion of intentional qualities that reflect an ethical stance – neglect those very dimensions of Buddhist psychology that may offer something both unique and revolutionary to Western psychology:

examining factors that may improve attention and concentration has been an important part of academic Western psychology theory and research for at least a century. However, inextricably tying ethics to attention, in such a way that the quality and type of our attention is fully dependent upon our intentions and attitudes towards self and other, is radically new to Western thinking. If Western views of mindfulness as a mere form of attention proliferate, then experimental psychological research on mindfulness will predominantly go in that direction, and the radical implications of conjoining the cognitive and the ethical may become lost.

The major enthusiasm for mindfulness in Western psychology and medicine derives, now, from a rather substantial number of scientific studies, many indicating that MBIs can effectively alleviate the suffering of people afflicted with a broad range of conditions, for example, chronic pain, multiple sclerosis, cancer and depression, to name but a few (see also [chapter 14](#)). How exactly this is achieved is not yet scientifically established. In other words, we cannot yet be sure just what it is about the mindfulness program that is responsible for these benefits, whether it is the special relationship between participant and MBSR instructor, the special kind of exchange among participants engendered by the program, the very act of merely sitting still and reflecting upon immediate experience, the implicit qualities of kindness that arise from time to time that both body and mind appear to like, or some other factors. In fact, given the limits of current research methods, we are unlikely to know for sure for a very long time, if we ever shall.

Two things, however, should seem rather clear: 1) An eight-week period of mindfulness meditation, even with regular daily practice, is not going to create highly skilled meditators, able to maintain moment-to-moment awareness of their experience during everyday life or even consistently while performing the mindfulness exercises. Interestingly, scientific studies even indicate that there is no or very little relationship between how much benefit in well-being people gain from the course and the amount of time they spend on their homework assignments practicing mindfulness[13]. 2) Modestly improved attention to moment-to-moment experience of what one feels and perceives doesn't really explain why participants should feel better doing so. In fact, one might actually think that greater awareness of the symptoms of illness would lead to an increase, not a decrease, in distress and would interfere with a maintained focus upon immediate awareness.

Thus there would seem to be something else going on that, at least sometimes, allows close awareness of moment-to-moment experience of even unpleasant perceptions, emotions or thoughts to be appreciated and maintained. This "something else" may, in fact, be directly related to cultivation of kindness, tolerance, courage and openness to the object of awareness. However else could one keep on closely examining unsatisfactory or even painful or threatening experiences of life, like immediate perceptions or emotions related to serious illness and loss? Within the model suggested here, the true value of MBI may be in creating new perspectives, and systems of value and meaning related to various dimensions of life (e.g., attitudes towards stillness, reflection, kindness and compassion to self, others and even the inanimate world) that are directly derived from the embodied experience of concurrent, synergistic development of attentional and ethical qualities. Within the Buddhist and MBI understanding, the cultivation of each is seen as synergistically reinforced by the cultivation of the other: enhanced kindness to the uncontrollable vagaries of life makes it possible to be in more direct contact with immediate experience; greater capacity to attend to perceptible experience, on the other hand, strengthens our capacity for kindness and patience.

Such a shifting of perspectives is not accomplished overnight, nor even over weeks or months. However, one needs to begin somewhere, and eight-week MBIs seem to start the process for many people, as indicated by the rather substantial body of scientific evidence.

That such programs require continuous nurturance, support and further deepening over the years is a basic tenet of the Buddhist psychology from whence they come, but generally remains a rather alien notion to many Western psychotherapists, who often have learned to apply primarily very short-term interventions. Switching paradigms for psychotherapists would require acknowledgement on their own part that they need to take much time to develop personal skills regarding their own mindfulness practice before they work with clients or other therapists in training programs.

The resistance to this idea still seems substantial, but failure to recognize such differences in attitude towards the value of self-experience may have important consequences for the development of MBIs within Western disciplines. It will be interesting to see how things evolve. Perhaps we can, as well, attempt to apply the same tools of kindness, compassion and equanimity to observing this process, with the clearly understood knowledge that although we may be able subtly to influence it, such historical processes, like the other vagaries of our lives, may be largely out of our control. Ironically, rather than this being a fatalistic attitude, such an attitude – difficult as it is to sustain – may, indeed, help us to steer the process and our relation to it – as well as possible.

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Chapter 12

Understanding and Cultivating Compassion in Clinical Settings

The A.B.I.D.E. Compassion Model

Compassion is an emergent property

It arises out of the interaction of non-compassionate processes

Compassion in action is relational, mutual, reciprocal and asymmetrical

Joan
Halifax



Understanding and Cultivating Compassion in Clinical Settings

Compassion should be the basis of medical care[1]. And yet, in Western medicine, too often clinicians suffer from a deficit of compassion. Caring without compassion causes not only patients to suffer, but clinicians and family members as well. This chapter brings into focus three perspectives related to compassion in relation to training clinicians in compassionate end-of-life care. The chapter begins with an exploration of types of compassion relevant for clinicians and others. It also unpacks a heuristic model of compassion that makes it possible for clinicians to see how to work with those faculties that foster compassion[2]. These three perspectives are the bases of the professional training program developed at the Upaya Institute, where hundreds of clinicians have been educated in compassion-based ethics, communication and contemplative interventions[3].

Compassion is often associated with religion. It is also believed to be, at times, the cause of distress in those who experience it[4]. And yet, recent research suggests that, on the contrary, compassion might be a source of hardiness, resilience and well-being[5]. It is, as well, an important feature of socialization essential to our individual and collective well-being[6], [7], [8].

Neuroscience research on compassion is in its early stages. For example, small numbers of meditation adepts have participated in neuroscience research so scientists can map the neural substrates of compassion[9],[10]. Other research projects have involved explorations of immune response[11].

Compassion seems to be an important mental, psychophysical and social feature in our human experience, and there appears to be a deficit of it in our society, including in our medical system, which is why the research on compassion has become more concerted in the past several years[12] (see also for more detail about the science underlying compassion [chapters 13 to 19](#)). As someone in the compassion training field, I felt it was important to understand the components of compassion, then develop a simple intervention that primes compassion, particularly for clinicians. This intervention is called G.R.A.C.E. and is currently used by physicians, nurses, social workers, psychologists and chaplains in various fields of patient care (see more details to this program in [Box VI](#)).

In the spring of 2011, I spent several months at the Library of Congress as a Distinguished Visiting Scholar writing a journal article on a heuristic model of compassion[2]. I did not feel that compassion had been sufficiently examined in order for adequate training approaches in the end-of-life care field to be developed. For many decades, I have been engaged in an exploration of compassion by examining the literature on compassion; analyzing my own experience as a meditation practitioner; receiving teachings on compassion from Buddhist adepts; being present for the profound suffering encountered in the end-of-life care field and in the prison system; studying the results of neuroscience and social psychology research in the areas of empathy, altruism and compassion; and training caregivers and patients in approaches to compassion. These combined experiences led me to question how we define compassion in our culture. This work encouraged me to explore the effectiveness of how we train others in compassion and to develop a compassion intervention for those in the healthcare field.





Categories of Compassion

Several years ago, I began to parse compassion into various categories. Compassion did not seem very nuanced from the Western perspective (see Harrington[13] and Halifax[14]), and there appeared to be more categories of compassion than is usually thought the case. I realized that this would be relevant to clinicians, particularly those who worked on palliative care teams, where team bonding is essential and the in-group is strong. As well, from the conceptual and ethical perspective, clinicians who work in the end-of-life care field have a unique relationship to conceptually-based compassion in giving care to those who are gravely ill.

I want to acknowledge the insights of His Holiness the Dalai Lama and Buddhist scholar John Dunne in assisting in clarifying various categories of compassion. There seem to be two large categories of compassion: referential or biased compassion, i.e., compassion with an object; and non-referential or unbiased compassion, i.e., compassion that is objectless and pervasive[14]. Both of these types of compassion are important for clinicians to actualize in clinician/patient interactions.

Referential or Biased Compassion Includes Various Subtypes:

Referential compassion is subdivided into different subtypes, which can also be distinguished in compassion for in-group or out-group members. The different types of referential as well as non-referential compassion are summarized below.

Biologically based compassion: Parent/child bond, family bond, sexual bond

Attached compassion: Bonded in-group: medical team, combatants, neighbors

Compassion through identification: Having suffered in a particular way and identifying with the suffering of one who has had a similar experience of suffering

Reasoned compassion: Ethically based compassion: compassion perceived as a moral imperative

Conceptually based compassion: Compassion that arises as a result of having insight into the nature of interdependence and that all beings want happiness.

The second type of compassion is *non-referential or unbiased compassion*, also called *universal compassion*. This category came to my attention through Tibetan Buddhist teachings on compassion offered by His Holiness the Dalai Lama. It is compassion without an object, where compassion pervades the mind of the experiencer as a way of being.

Non-Referential or Unbiased Compassion:

Universal compassion: Pervasive compassion that is not directed towards an object

A.B.I.D.E. Model of Compassion

Compassion has been defined as “the emotion one experiences when feeling concern for another’s suffering and desiring to enhance that person’s welfare”[15] (see [chapter 10](#) for broad definitions of compassion). Compassion is believed to have two main aspects: the affective feeling of caring for one who is suffering, and the motivation to relieve that suffering[16]. This definition is frequently used and represents a narrow definition of compassion. However, it might not take into account, for example, the experience of non-referential compassion. Moreover, the A.B.I.D.E. model assumes that compassion is a process that is contingent and emergent. It is often inter-relational and mutual, reciprocal and asymmetrical. Also, compassion is possibly not a discrete feature but an emergent and contingent process that is context sensitive and dependent on other mental features. This view of compassion can have important consequences in the clinical setting (for more detail

see [Box VI](#)) in relation to the G.R.A.C.E. intervention that is designed for compassion-based clinician/patient interactions.

Training others in the cultivation of compassion, particularly clinicians working in the end-of-life care field, necessitates that we clarify what we mean by compassion, what the sub-components of compassion are, what the processes that nourish and enhance compassion are and, in the case of clinicians, what sustains compassion in giving care to those who are suffering from a catastrophic illness or injury.

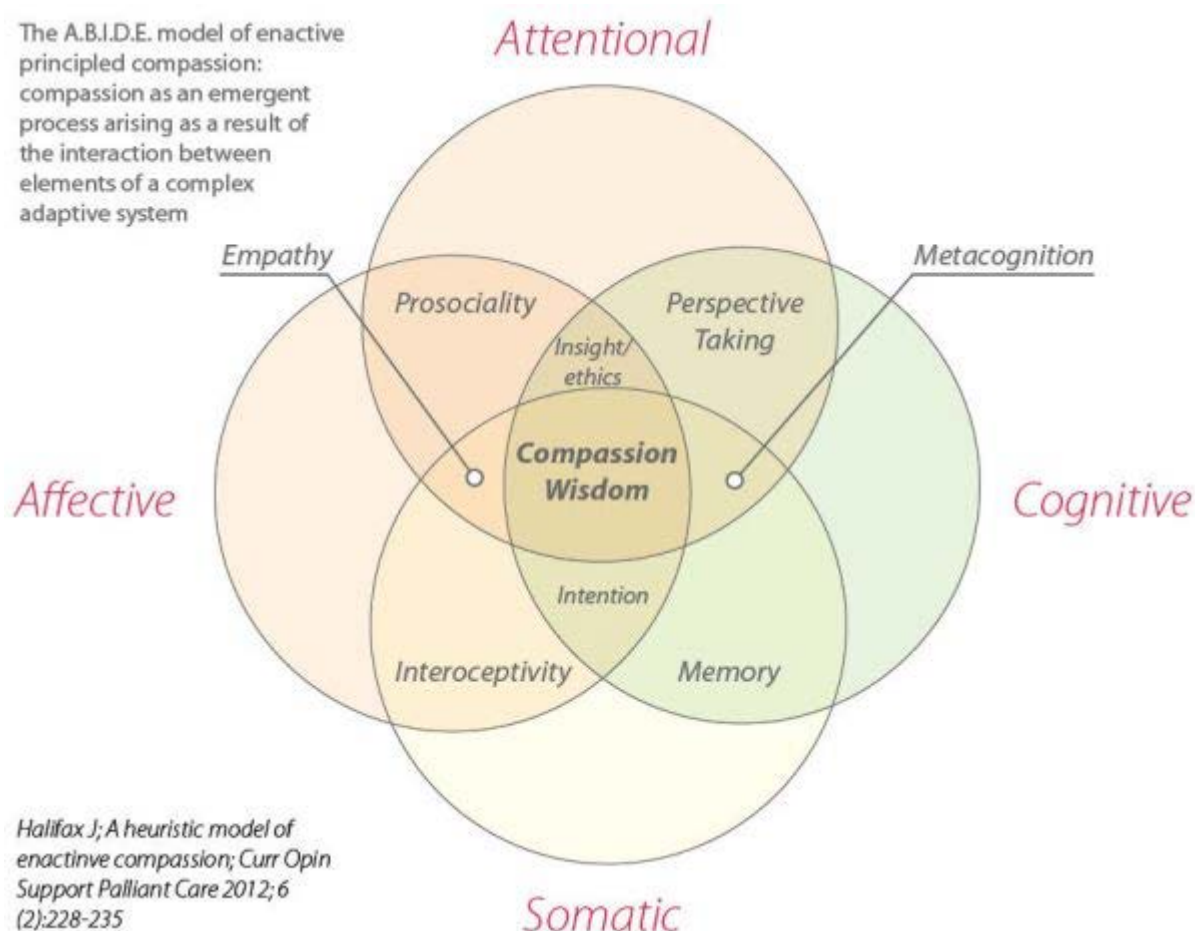


Figure 1: The A.B.I.D.E. Model

In the present model and in line with other views (see also [chapter 8](#) and [chapter 9](#)), compassion is an emergent process arising out of the interaction of non-compassion processes.

The A.B.I.D.E. model is thus divided into three interdependent experiential areas that prime compassion: the A/A Axis, giving rise to attentional and affective balance; the I/I Axis, reflecting the cognitive domain and relating to the cultivation of intention and insight that support discernment; and the E/E Axis, or embodied and engaged processes that support engaged responses to the presence of suffering, and foster ethical grounding, eudaemonia and equanimity. These axes are non-linear and co-emergent.

The A/A Axis and Attentional Balance

The A/A Axis encompasses the subjective experiences of attention and affect; these domains support mental balance. The first part of the A/A Axis is attention. Attention forms the stable base of compassion; it is both biased by and contingent on affect and context[17]. William James, the nineteenth century psychologist, wrote that “Everyone knows what attention is. It is the taking





possession by the mind, in clear and vivid form, of one out of what seem several simultaneously possible objects or trains of thought. Focalization, concentration of consciousness are of its essence. It implies withdrawal from some things in order to deal effectively with others”[18].

Attention entails the allocation of mental processing resources to an object. Attention can be focused, selective, sustained, alternating, dispersed or divided. It can also be panoramic, where the attentional ground is inclusive, reflective and non-judgmental.

One cannot quite imagine compassion being present without attention being stable, whether attention is focused or panoramic. In order to recognize suffering in others or oneself, one must have cultivated attentional balance, where attention is at least focused and sustained or panoramic and inclusive. The ability to perceive in an unfiltered way the nature of suffering and also one’s own responses to suffering requires attentional balance. Stable attention is sustaining, vivid and effortless; it is non-judgmental, non-reactive, not contracting in relation to unpleasant phenomena and not clinging to a desired outcome. Attention also makes it possible for cognitive processing to be grounded; cognitive control is needed for attention to be balanced, so that the attentional field is not disturbed by assumptions, judgment and reactivity.

Balanced attention can make accessible an unambiguous perception of reality, and in the case of compassion, an unbiased perception of suffering. Recent research has shown that the attentional training that entails a component of mindfulness meditation results in decreased susceptibility to the effects of emotionally arousing events upon task performance. This suggests that attentional balance enhances one’s ability to perceive reality non-judgmentally, including the reality of suffering[19]. This ability is essential for compassion to be present when caring for those who are suffering from catastrophic illness and when giving compassion-based attention to family members and colleagues who are distressed around issues related to suffering, dying and death.

The A/A Axis and Affective Balance

The second domain in the A/A Axis is the emotional or affective domain. For clinicians, kindness and equanimity are essential affective processes associated with compassion. Kindness is characterized by a dispositional tenderness towards others combined with genuine concern. Equanimity is a process of stability or mental balance that is characterized by mental composure and an acceptance of the present moment. These two qualities are essential for clinicians who care for the dying. Equanimity also supports empathy, another affective feature frequently associated with the priming of compassion. Empathy is affective attunement with another. Affective attunement, often associated with compassion, might or might not elicit kindness, depending on the psychological makeup of the experiencer or the capacity of the experiencer to regulate her or his arousal level and maintain equanimity[6]. In the case of the latter situation, emotion regulation and attentional and affective balance are essential. These conditions, when engaged, can lead to compassion. Recent research has indicated that affective balance, compassion and other prosocial emotions can stabilize and broaden the attentional base and allow one to be more resourceful and have the capacity to make clearer discernments and decisions. Negative emotions, such as anger and fear, seem to narrow the attentional base and color perception, making discernment challenging[20]. In addition to kindness and equanimity, altruism, empathy, sympathetic joy, gratefulness and a long list of mental processes associated with positive psychology and prosociality can be fostered. Like attention, these seem to be trainable processes of mind. These prosocial processes can be greater or lesser features associated with the emergence of compassion. Whatever affective features are engaged, balance and regulation of these faculties is essential for compassion to be primed. There is no question that affective balance, combined with attentional balance, or equanimity, is critical to clinician well-being and resilience. The end-of-life

care field is a setting where deep emotions and existential issues prevail. The stabilization and regulation of the mental continuum in the face of dying on the part of clinicians can have profoundly beneficial effects on both clinician and patient[3].

I/I Axis and Prosocial Ethical Intention and Insight

One can ask the question: how do we regulate emotional responses like empathy so compassion can be nurtured and one does not fall into reactions of avoidance, abandonment, numbness or moral outrage, responses that are not uncommon in the clinical setting where the dying are cared for? Clearly, one of the most important interventions is balanced attention and affect (A/A Axis), as well as the ability to guide the mind in accord with one's intentions and stabilize the mental continuum in order to have insight about suffering, its origins and how to transform suffering. These dimensions are characteristic of the I/I Axis, the cognitive dimension that entails intention and insight. Both intention and insight must operate in conjunction with attentional and emotional balance (A/A axis), which enhance one's ability to have access to, be aware of and have potential control of the attentional, affective and cognitive continuum. Intention and insight can also support attentional and affective balance. From the point of view of this model, the attentional, affective, cognitive and somatic domains cannot be isolated, one from the other, nor can these domains be dissociated from the social, cultural and environmental surround of the individual.

Intention

The intention to transform suffering is one of the features that distinguishes compassion from empathy. From the point of view of compassion, intention is a key process in the cultivation of this mental faculty[21]. It is based in the prosocial experience of the motivation to transform the suffering of others as well as oneself. Intention priming compassion is based in part on an ethical orientation, which is the foundation of one's motivation to not harm, do good and to help others. This moral ground is fundamental to the practice of medicine. Even if one's motivation is altruistic, it can happen that aversive reactions and actions arise out of one's conditioning. In working with dying people, aversion is not uncommon. In this case, it is essential to override habitual responses, engage in positive and realistic appraisal, and learn how to down-regulate arousal or shift away from thoughts and behaviors that are destructive, from abandoning patients, engaging in moral outrage, or simply becoming numb to the suffering of patients, families and colleagues. This is usually done through the experience of insight based in self-awareness and supported by the intention to decrease the suffering of the patient and all those associated with the patient.

Insight

The second aspect of the I/I Axis is that of insight. Insight can support a metacognitive perspective and mental pliancy, hardiness and autonomy. In this cognitive dimension, self-awareness, including access to memory, can lead to insights about the nature of reality and can foster reappraisal and down-regulation, should that be necessary, when serving those who are dying. It also primes perspective taking or cognitive attunement, which allows one to understand the mental experience of another, whether colleague, dying person or family member. In a complementary fashion, the I/I Axis can nourish insight into the distinction between another and one's self, a key feature in referential compassion, or compassion with an object[14], [22]. Another dimension that is engaged in the compassion process is the recognition of one's moral grounding, which includes the deep sense of a moral imperative in how we relate to the world, and moral sensitivity that makes it possible for one to discern moral issues[23]. These features lead to the development of moral character, the basis of compassionate care[24]. In addition to these features in the cognitive domain, insight into the truth of impermanence and interconnectedness is essential, as is the





realization that all beings on some level wish to be free of suffering and want happiness. A final feature in the cognitive domain that is important is that there be no attachment to an outcome. Of course, compassion entails the aspiration to transform or end suffering. At the same time, the attachment to a particular outcome can be a cause of suffering. These two valences of 1) not having an unrealistic expectation for an outcome and 2) the dedication to supporting a beneficial outcome in relation to the experience of suffering can be viewed as the “two sides of the same coin” of intention. A clinician strives diligently to alleviate disease, pain and suffering, for example, but, at the same time, she or he has, in the best circumstances, “therapeutic humility”, which leads the clinician to realize that he or she must accept the eventual course of events that may be swayed by influences beyond one’s control. In sum, the I/I Axis, which has a cognitive base that is interrelated with the attentional and affective domains, has two valences: intention and insight. These interdependent valences produce mental pliancy and discernment, and can prime context-sensitive, principled compassion.

E/E Axis and Ethical Engagement and Embodiment

The E/E Axis is comprised of the somatic process associated with embodiment and engagement. The E/E Axis gives rise to three key features: *ethike* (moral virtue), equanimity and *eudaemonia*. The E/E axis is based on an enactive process where mind, body and the environment are contexts for each other and become the means for the generation of the embodied dimension of the inter-subjective, mutual, grounded and interactive processes associated with compassion. Embodiment can be said to be the source of the felt sense of another’s suffering through the experience of inter-subjective resonance, wherein another’s experience feels as if it is happening in the subject’s own body. Embodiment is viewed as forming a fundamental base for the compassionate, interactive, enacted, engaged life. The enactive experience reveals directly and indirectly how the mind, body and environment are inter-related in a dynamic co-emergent process. Here, perception, cognition, and action or engagement give rise to the subjective experience of one’s embeddedness in the world.

Engagement with and Response to Suffering

The E/E Axis is also associated with the experience of the body having a dispositional readiness for action in the environment. Here, one’s bodily being and the environment are contexts for each other and the interactive basis for the generation of compassion. Compassion in action is relational, mutual, reciprocal and asymmetrical. This axis grounds inter-subjectivity in bodily action and interaction. From the base of the embodied mind, engagement with the world arises. In the case of compassion, the mind is in a state of readiness to meet the world in response to suffering. Without the world priming the mind, compassion would not arise as a non-linear, interdependent, adaptive and sense-making process. One of the mental features that arises when all these axes are activated is equanimity. Equanimity is characterized by a calm, even, balanced state of mind; it is also supported by the realization of the truth of impermanence and holding things in equal regard. This mental faculty is accompanied by *eudaemonia*, translated as human flourishing or happiness, another potential outcome of compassion. For the Greeks, *eudaemonia* correlates with the highest human good and the exercise of goodness and morality, what Buddhists call “basic goodness”. A third valence is “*ethike*”, or moral virtue, which is also present in principled compassion and reflects the outcome of intention and insight in action. Principled compassion is compassion that does no harm to self or other. Compassion is an emergent process arising out of the interaction of a number of interdependent attentional, affective, cognitive and embodied or somatic processes, all of which themselves can be trained in. There is no compassion without attentional and affective balance. Compassion is not possible without prosocial intention and insight, including insight about the distinction between self and other. And compassion is an

embodied and engaged process that can lead to a direct and transformative relationship with suffering and be enacted in the world. Since compassion seems to be an emergent process rather than a mental feature, the implication that this has regarding the trainability of compassion for clinicians is quite different from assumptions often made by those who wish to train others in compassion. One can set the field for the emergence of compassion by training in the faculties associated with the A/A Axis, I/I Axis and E/E Axis. In the last section of this paper, I propose an intervention that can support the priming of compassion for clinicians by bringing together the features described in the compassion model.

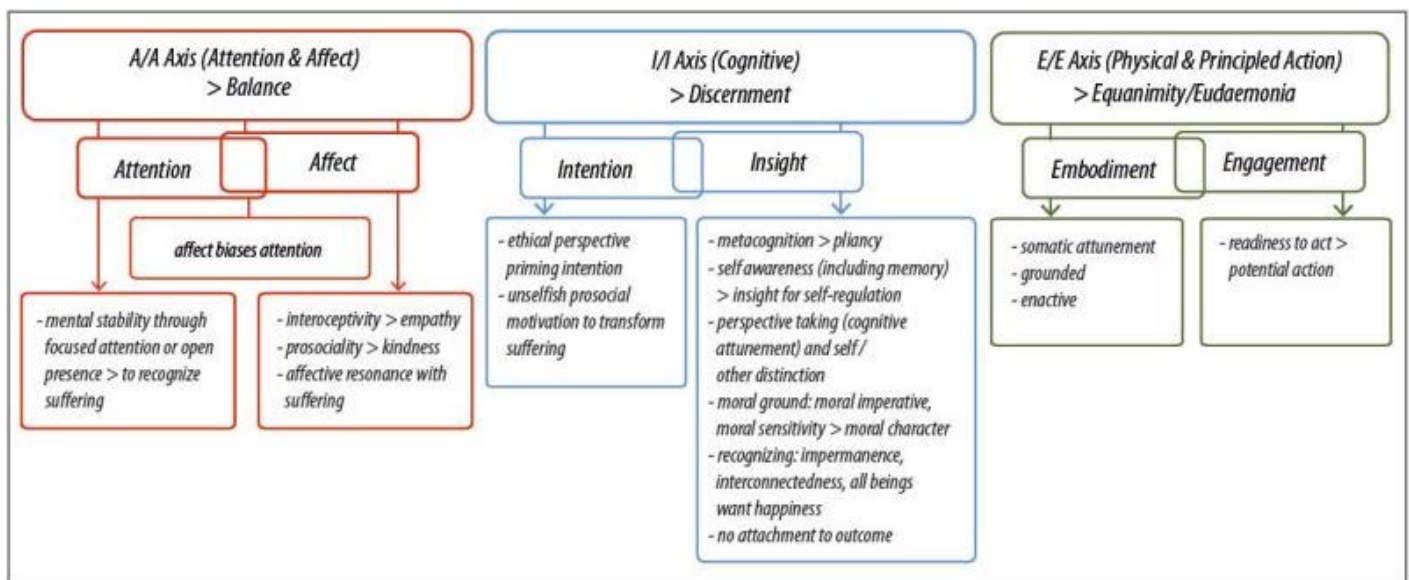


Figure 2: Summary Figure

This is a summary figure of the A.B.I.D.E. heuristic model of modes that prime and optimize principled compassion (attention is biased, contingent upon affect and context)

The mnemonic of the A.B.I.D.E. compassion model can assist clinicians in recalling the elements of the model, though it is important to recall that the model itself is non-linear, and compassion is an emergent process arising from the combination of all these faculties:

A.B.I.D.E. = Compassion:

A = Attention and Affect >

B = Balance

I = Intention and Insight >

D = Discernment

E = Embodiment and Ethical Enactment

Engagement > Equanimity/Eudaemonia





Summary

In training clinicians to care compassionately for those who are dying, Upaya's professional training program in compassionate end-of-life care has developed a granular approach to compassion for teaching purposes. This chapter has outlined a typology of compassion, parsing compassion into two main types: referential compassion and non-referential compassion, in other words, compassion with an object and universal compassion. The chapter then goes on to outline a model of compassion that includes the interaction between attention and prosocial affect, ethical intention and insight, and embodiment and engagement.

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PART 3

Science of Compassion



Science of Compassion

13

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Chapter 13

Mind your Hormones!

The Endocrinology of Compassion

Jennifer S.
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Oxytocin increases trust and generosity

Compassion reduces stress-related hormones such as cortisol

Immune molecule interleukin is increased through compassionate doctors

Mind your Hormones!

Of all human emotions and behaviors, compassion may be the most hormonal, at least if you believe the scientific literature. Or to put it more precisely, many scientific studies find strong evidence that compassion and its constituent components, such as empathy, are both influenced by endocrine factors and influence them in turn. It is these bi-directional relationships between the human endocrine system and compassion that are the focus of this chapter.

Defining Terms

Endocrinology is the field of medical science that focuses on all things related to the production, release, uptake and physical effects of hormones. *Hormones*, in turn, are substances, usually peptides or steroids, which are produced by one tissue and conveyed by the bloodstream to another tissue to effect physiological activity, such as growth or metabolism within that second tissue. Classically, hormones were understood to be produced by specialized glands in the body from whence they floated through the blood to impact any number of other bodily tissues.

But as with many things in science, ongoing discoveries have complicated this simple picture in ways that are directly relevant to our current discussion. For example, substances that are hormones in the body often function as neurotransmitters in the central nervous system (CNS). A classic example of this is the peptide hormone oxytocin, of which we'll have much to say in this chapter. Oxytocin is produced primarily in the hypothalamus, an ancient area at the bottom of the brain that produces many other hormone-like substances that have profound behavioral effects. For many years, oxytocin was known to medicine primarily for its roles in promoting childbirth and nursing. In this role, oxytocin is a classic hormone. It is produced in one tissue (the brain) and floats through the blood to other tissues (the uterus and breast) where it has its effects. But discoveries over the last ten years or so have demonstrated that oxytocin also has profound effects on the brain directly related to social behavior, including empathy, in humans and other mammals[1], [2], [3], [4]. In this role oxytocin behaves more like a neurotransmitter than a classic hormone. Oxytocin is far from alone in being a hormone with multiple other talents. For example, another classic hormone that we'll discuss in this chapter, cortisol, has so many effects on the immune system that one could almost consider it to be an immune molecule as much as an endocrine one.

The Endocrine System from 30,000 Feet

The intricacies of the body's vast and complex endocrine pathways are far beyond our purview in this brief chapter. So we'll have to make do with a simplified view that merely touches upon major aspects of hormonal organization and function – a 30,000-foot view of the major landmarks of endocrine geography.

All areas of the brain are likely to impact hormonal functioning one way or another. But the *hypothalamus* is especially relevant to endocrinology because it serves as the headgate for most of the body's major hormonal pathways. It is also the area of the brain most intimately connected, both functionally and physically, with the body's prime endocrine organ, the *pituitary gland* (*Figure 1*). In response to signals from other brain areas, as well as from the body, the hypothalamus secretes a number of hormones that float down a small and specialized bloodstream connection to the anterior (or forward) part of the pituitary gland. These hormones stimulate the production and release of a wide range of other hormones by the *anterior pituitary*, or *adenohypophysis*, which, in turn, influence many other bodily glands and organs, including the thyroid gland, the adrenal glands and the sexual organs. The second prime endocrine role of the hypothalamus is to produce *oxytocin* and the closely related hormone *vasopressin*. These two hormones are transported down nerve axons into the posterior pituitary gland, also known as the *neurohypophysis*, from which they are released.

Because this chapter focuses on the endocrinology of compassion, rather than endocrinology in general, we can only make passing reference to many of the important hormones secreted by the anterior pituitary, including *thyroid-stimulating hormone (TSH)*, which regulates the thyroid gland, and *follicle-stimulating*





hormone (FSH) and luteinizing hormone (LH), which together drive the human sex organs and thereby control sexual development, egg and sperm production and the menstrual cycle.

There is one vast hormonal system that deserves additional comment here and that is the *hypothalamic-pituitary-adrenal (HPA) axis*, so named because it passes from the hypothalamus, through the anterior pituitary and from there down to the *adrenal glands* in the abdomen. Along with the *autonomic nervous system*, the HPA axis is the body's primary stress response system, and its end product, the glucocorticoid called *cortisol*, is arguably the body's primary stress-related molecule ([Figure 2](#)). We say arguably, because cortisol is charged with the strange role of feeding back on the HPA axis to turn itself off, which thereby makes it probably the body's most important anti-stress molecule. Cortisol is also well known to critically regulate immune function. Cortisol has myriad physiological effects on brain and body that are beyond the scope of this chapter, but as we shall see it appears to play important roles in compassion and related states such as empathy, perhaps especially in the context of stress, which is known to strain people's ability to maintain compassionate attitudes.

With this brief survey of the endocrine system we turn now to examining associations between compassion/empathy and oxytocin and cortisol. For the sake of consistency with other chapters in this volume, we define empathy as sharing the emotional state of another, in contrast to compassion, which we take as the aspiration to help free others from suffering. Following this we'll extend our discussion to explore how effects on these hormonal systems, as well as the autonomic nervous system, may help explain recent findings that compassion may benefit immune functioning.

Associations of Oxytocin with Compassion and Related Emotional, Cognitive and Behavioral States

In the last ten years oxytocin has gone from the backwaters of labor and delivery to the front pages of the scientific and popular press, all because of its growing reputation as the "love hormone". As we'll see, this characterization is a partial truth at best, but not without some merit. The story of oxytocin and social functioning began in many ways with a series of studies showing that oxytocin functioning in the brain explained the remarkably different patterns of social behavior seen in two closely related subspecies of a rodent called a vole[\[5\]](#). Prairie voles form lifelong monogamous bonds between breeding partners and have high levels of oxytocin receptors in key brain areas, especially the nucleus accumbens, a region repeatedly associated with reward, reinforcement and motivation. On the other hand, montane voles are generally promiscuous loners, and when one looks in their brains one sees far lower oxytocin activity. Moreover, studies have shown that loyal, loving prairie voles can be made to behave like their more callous montane cousins by disrupting oxytocin activity in their brains.

Increasing evidence suggests that in humans oxytocin plays a similarly important role in social processes in general, and in prosocial emotions in particular. For example, several studies have shown that genetic differences in the gene that encodes for the oxytocin receptor are associated with prosocial behavior and empathy[\[6\]](#), [\[7\]](#), [\[8\]](#), as well as with neurological/psychiatric conditions such as autism that are characterized by deficits or abnormalities in social behavior and empathy. Interestingly, these same genetic variants appear to impact the structure and functional coupling of brain areas, including the hippocampus and amygdala, that are essential for coping with stress and danger, especially when these threats are of a social nature[\[6\]](#).

If oxytocin is so important in trust, attachment and cognitive/emotional states of importance to compassion, one might expect to find studies showing that increased levels of oxytocin are reliably associated with increased compassion. In fact, the data on oxytocin levels and states related to compassion are very mixed, and for a number of years this slowed research in the field. We suspect the lack of incontrovertible associations between levels of oxytocin and empathy/compassion has to do with the fact that it is not so easy to measure oxytocin where it matters. Unlike the situation in experimental animals, it is not possible to directly measure oxytocin in the brains of living humans. It can be measured in spinal fluid but this requires a spinal tap and measuring things in spinal fluid is a little bit like attempting to understand the functioning of a city by studying its sewage discharge – not totally impossible, but far from ideal. Many studies have examined oxytocin levels in the blood, but the issue with these studies is that it is far from clear how blood oxytocin relates to oxytocin activity in the brain[\[9\]](#). Nonetheless, some evidence suggests that empathy can affect blood levels of oxytocin. For example, one study found that watching film clips designed to induce empathic feelings for others found that self-reported increases in warmth, compassion (but not distress) predicted

increases in blood oxytocin levels of almost 50%, which were, in turn, related to subsequent increased generosity towards others[10].

The breakthrough in oxytocin studies came when researchers realized that the hormone could be delivered to the brain when given as a nasal spray. Subsequent studies have shown that intranasal oxytocin produces multiple effects of direct relevance to compassion, including increasing 1.) generosity towards others[11]; 2.) feelings of trust[12]; 3.) time spent in gazing at the eyes of other people[13]; and 4.) ability to accurately read the emotional states signaled by facial expressions of other people[13]. Oxytocin administration increases people's sense of empathic concern for crime victims without increasing the desire to punish the criminal offenders[14], and, in response to hearing the crying of infants, induces changes in brain activity that have been repeatedly associated with empathy[15]. Finally, studies have shown that intranasal oxytocin directly enhances feelings of empathy in both men and women, and in fact increases men's empathy ratings to the baseline level of females prior to oxytocin administration[16], [17]!

But recent studies have revealed a potential dark side to oxytocin, at least in relation to the expression of universal compassion that is the goal of many meditative and spiritual practices. It has been known since time immemorial that people tend to favor other individuals they view as being similar to themselves and/or who belong to one's in-group. It appears that oxytocin actually enhances the distinction between in-group and out-group by making people more cooperative and caring towards in-group members and more defensive towards out-group members[17]. Oxytocin does not appear to make people more hostile or hateful towards out-group members (i.e., people perceived as different from oneself), but neither does it appear to extend the range of people towards whom one feels empathy or concern. These findings have led some to suggest that rather than being the "love hormone", oxytocin should perhaps be characterized as the "tribal hormone". This raises an extremely important and interesting question about the relationship of oxytocin to compassion meditation practices that, to our knowledge, has never been tested. Do compassion practices "piggyback" onto oxytocin systems in the brain by making practitioners see more and more people as belonging to their in-group (and thereby increasing oxytocin function in response to these people), or do compassion practices have, in one way or another, the ability to suppress oxytocin's tendency to only care for those one perceives as belonging to one's in-group?

Cortisol, the Stress Response and Compassion

We all know from personal experience that being stressed out does not typically bring out our most caring behavior towards others. Studies tend to confirm this, especially when the stressor is social in nature. For example, people who are socially excluded in an experimental paradigm show less subsequent prosocial behavior towards others[18]. It is important to note in this regard that oxytocin has been shown to reduce stress-related patterns of brain activation (i.e., activation of the amygdala) in response to socially threatening images and to reduce cortisol and autonomic nervous system responses to laboratory social stressors[7], [19], [12]. Similarly, the same oxytocin receptor gene that has been associated with reduced empathy has also been shown to promote increased autonomic stress responses[7].

These findings might suggest that cortisol and other stress mediators are "anti-compassion" molecules, but as with so many things in biology the truth is more complex, and more interesting. In fact, significant data show that people who are unable to effectively activate stress responses either in response to social stressors or in response to the distress of others are at increased risk of a trait called callousness, which is diametrically opposed to empathy and other core components of compassion in general and with social threats in particular (reviewed extensively in Shirtcliff et al.[20]). This effect has been extensively studied for cortisol. In children, adolescents and adults, lower levels of cortisol have been repeatedly associated with a lack of empathy and other traits that contribute to psychopathy, which includes an inability to love or establish meaningful personal relationships among its diagnostic elements. These reductions have been observed at rest and for cortisol responses to social stressors. In addition to reductions in cortisol production/release, lack of empathy has also been associated with a flattening of the diurnal pattern of cortisol release, an abnormality that is observed in many medical conditions and in major depression, another condition associated with impairments of empathy[21]. Interestingly, and important for the experimental findings we will describe next, the literature suggests that environmental adversity may be an important factor in a subset of children who display chronic antisocial behavior who also have elevated circulating concentrations of cortisol[22]. In contrast, early life adversity does not appear to play a role in children who exhibit callous and unempathic traits who also display





low circulating concentrations of cortisol[22].

So would training people to be more compassionate lower cortisol activity, as one would predict from the ability of oxytocin to reduce cortisol, or would it increase cortisol activity, as one would predict from the finding that low cortisol levels are associated with lack of empathy? Although no definitive answer can be given at this point, data from our group provide intriguing clues, and suggest that the answer is “neither”[23], [24], [14]. We taught a 6-week compassion-based training program, the CBCT program (see for more detail about CBCT [Box III](#) and [Chapter 1](#)) to medically and psychiatrically healthy college freshmen and had them participate in a standardized laboratory psychosocial stressor (Trier Social Stress Test [TSST]) either before or after six weeks of meditation training. While we found no effect of compassion meditation training per se on cortisol responses to the TSST when compared to an active control condition (a health education group), we found an intriguing association between amount of meditation practice within the compassion group and cortisol responses. Participants who engaged in significant “at home” practice had no reduction in how much cortisol increased in response to the stressor, but had their cortisol levels return to the pre-stressor baseline significantly faster than individuals with minimal practice time during the study ([Figure 3](#)). These results suggest to us that compassion training may preserve appropriate acute stress responses, while at the same time attenuating non-adaptive prolonged stress responses once the stressor has passed, the type of “chewing on things” that has been shown in many studies to increase the risk of depression, anger and a number of medical illnesses[25].

Compassion, Endocrinology and the Immune System

We have already discussed the fact that endocrine hormones implicated in compassion, especially oxytocin and cortisol, have profound effects on central nervous system functioning. These hormones also powerfully impact immune function in complex ways (see again [Figure 2](#)) that are likely of direct relevance to health, and that may explain a curious recent finding that directly links empathy to infectious disease outcome. In a large randomized trial, patients with colds who experienced their doctors as more empathic during a clinical visit recovered from their illness more rapidly, and had less severe symptoms, than those who experienced their doctors as less empathic[26]. Interestingly, patients who experienced their doctors as more empathic also had higher nasal wash levels of the important immune molecule interleukin (IL)-8, raising the possibility that the experience of empathy might impact immune functioning in ways that promote health. These findings support and extend earlier data that people with high levels of social support were less likely to develop colds when experimentally exposed to viruses in nasal spray[27].

In addition to potentially optimizing immune function in the face of pathogen exposure, a number of social/emotional factors related to compassion have been shown to impact immune functioning in ways known to affect both mental and physical health. To understand these findings it is important to know that the mammalian immune system has two large interacting subsystems: a fast acting and non-specific one that is often referred to as *innate immunity* and is characterized by *inflammation*, and a slow acting and specific system often referred to as *acquired immunity* that is characterized by T cell activity and the production of antibodies that clear pathogens from the body. Overwhelming evidence demonstrates that many aspects of the modern world conspire to increase chronic inflammation even in the absence of any evidence of ongoing infection[28]. This chronic increase in inflammation has, in turn, been associated with the development of a number of psychiatric diseases, including major depression, bipolar disorder and schizophrenia, as well as many physical conditions including cardiovascular disease, diabetes, cancer and dementia. Importantly, both acute and chronic psychosocial stress has been shown to promote increases in chronic inflammation, with these effects being stronger in individuals with histories of early life adversity (e.g., trauma, neglect) than in others[29], [30]. Together these findings raise the possibility that activation of inflammation may be one pathway by which social stress promotes depression. These findings may also help account for the repeated observation that depression earlier in life predicts the subsequent development of many modern diseases in which inflammation is known to play a role[31].

In this context, recent findings regarding the effect of compassion meditation on inflammatory responses to a psychosocial stressor (the TSST) are especially relevant. In the same population of college freshmen described above, we found that – much as with cortisol – although no effect was seen for randomization to compassion meditation per se, within the compassion group amount of time spent practicing during the study was strongly associated with inflammatory responses to the TSST[23], [24], [14]. Specifically, those who

engaged in significant at home practice also exhibited reduced production of an important inflammatory molecule in the blood, the cytokine IL-6, across the TSST (see again [Figure 3](#)). Moreover, increasing time spent practicing was correlated with reductions in IL-6 stress responses. At least in this study sample, changes in cortisol response to the TSST did not seem to be associated with meditation effects on stress-induced inflammation. On the other hand, increased practice time was associated with reduced autonomic nervous system responses to the TSST and autonomic function during the TSST, in turn, predicted IL-6 levels after the stressor (unpublished data). Also important was the observation that cortisol and immune responses to stress measured before the beginning of compassion meditation did not predict the extent to which people would go on to practice the meditation program ([Figure 3](#))[24]. Taken together these findings suggest that the practice of compassion meditation may have reduced the level of stress perceived by individuals exposed to the TSST, as indexed by reduced autonomic reactivity, which in turn led to reductions in inflammation, all consistent with multiple lines of evidence suggesting that autonomic responses to stress play an important role in modulating inflammation[32].

Whether these effects of compassion meditation practice on autonomic, neuroendocrine and immune responses to social stress would be apparent in other age groups, or in populations with medical or psychiatric illness, remains unknown. Interestingly, however, in a recent study of 71 adolescents in state foster care, amount of compassion meditation practice during a six-week training period was associated with reductions in resting-state inflammation, as indexed by salivary concentrations of the acute phase reactant, c-reactive protein (CRP) ([Figure 4](#))[33]. These findings are especially encouraging given that levels of CRP were high in this population at the start of the study, consistent with the high rate of early life trauma in children placed in foster care in the United States, and consistent with replicated associations between early life adversity and elevated CRP[34]. Whether these meditation-induced reductions in inflammation would persist after training and/or translate to long-term protection against illness is one of the most important unanswered questions in the arena of compassion and endocrinology/immunology.

Summary and Future Directions

The data supporting a role for endocrine factors in the building blocks of human compassion are strong, especially for oxytocin, although the role for these hormonal factors in the types of universal compassion espoused by world spiritual traditions is less clear. Nor is it definitively understood if and how the oxytocin system is involved in aspects of social cognition that are related to compassion such as empathy or perspective-taking, or in the processes by which empathy may be translated into compassion. Significant epidemiological data also support the notion that prosocial emotions and behaviors closely linked to compassion offer real mental and physical health benefits. It is less clear whether training in compassion can convert these associational findings into tools with therapeutic potential, although preliminary results are promising in this regard. It will be essential for future studies to map out the pathways whereby increasing compassionate thoughts and actions produces health-relevant changes in endocrine and immune function. For example, a challenge for researchers going forward will be to explore if, and how, compassion meditation-induced changes in oxytocin function are related to changes in HPA axis and immune responses to the types of stressful situations that often impair empathy and even more often promote ill health.

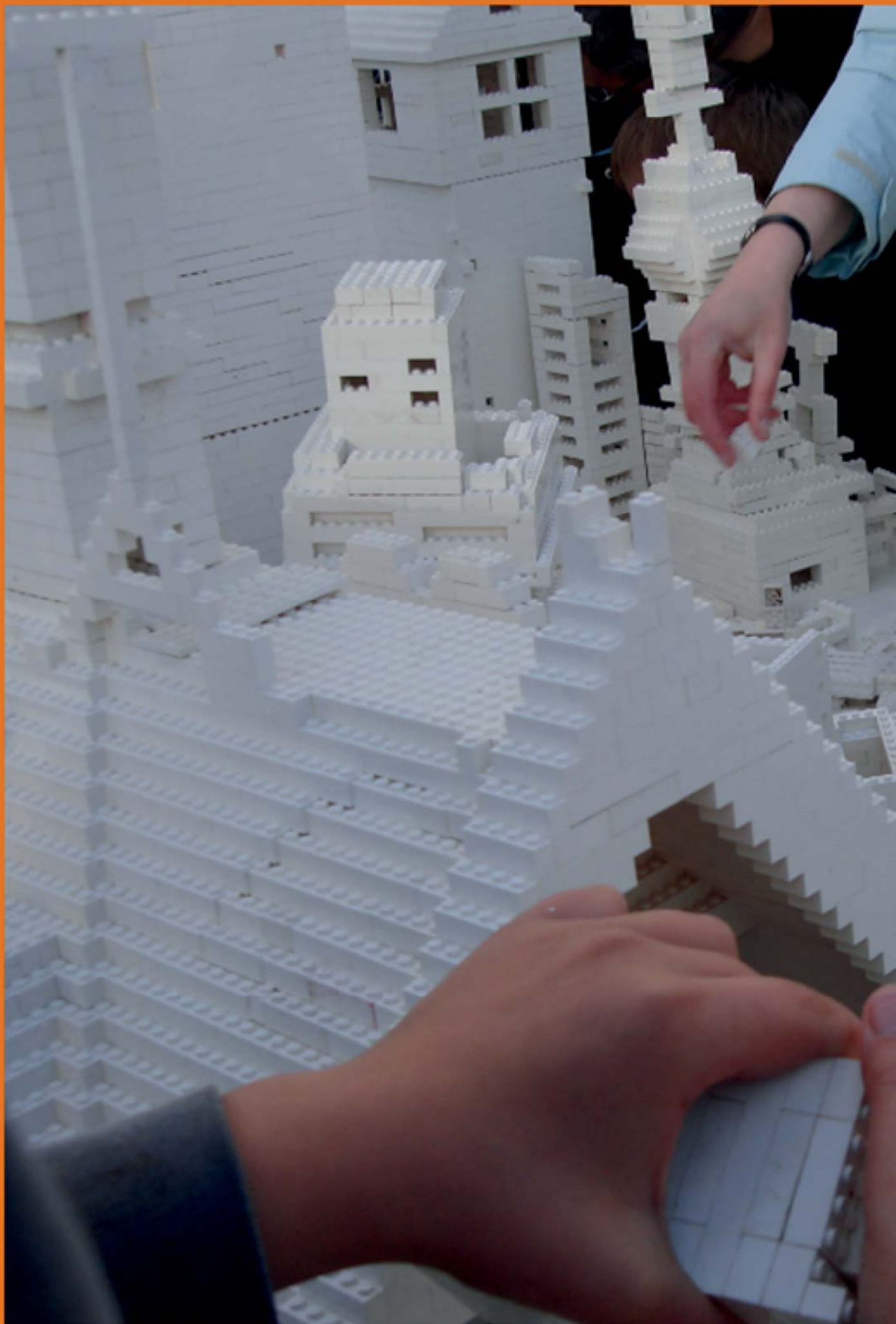
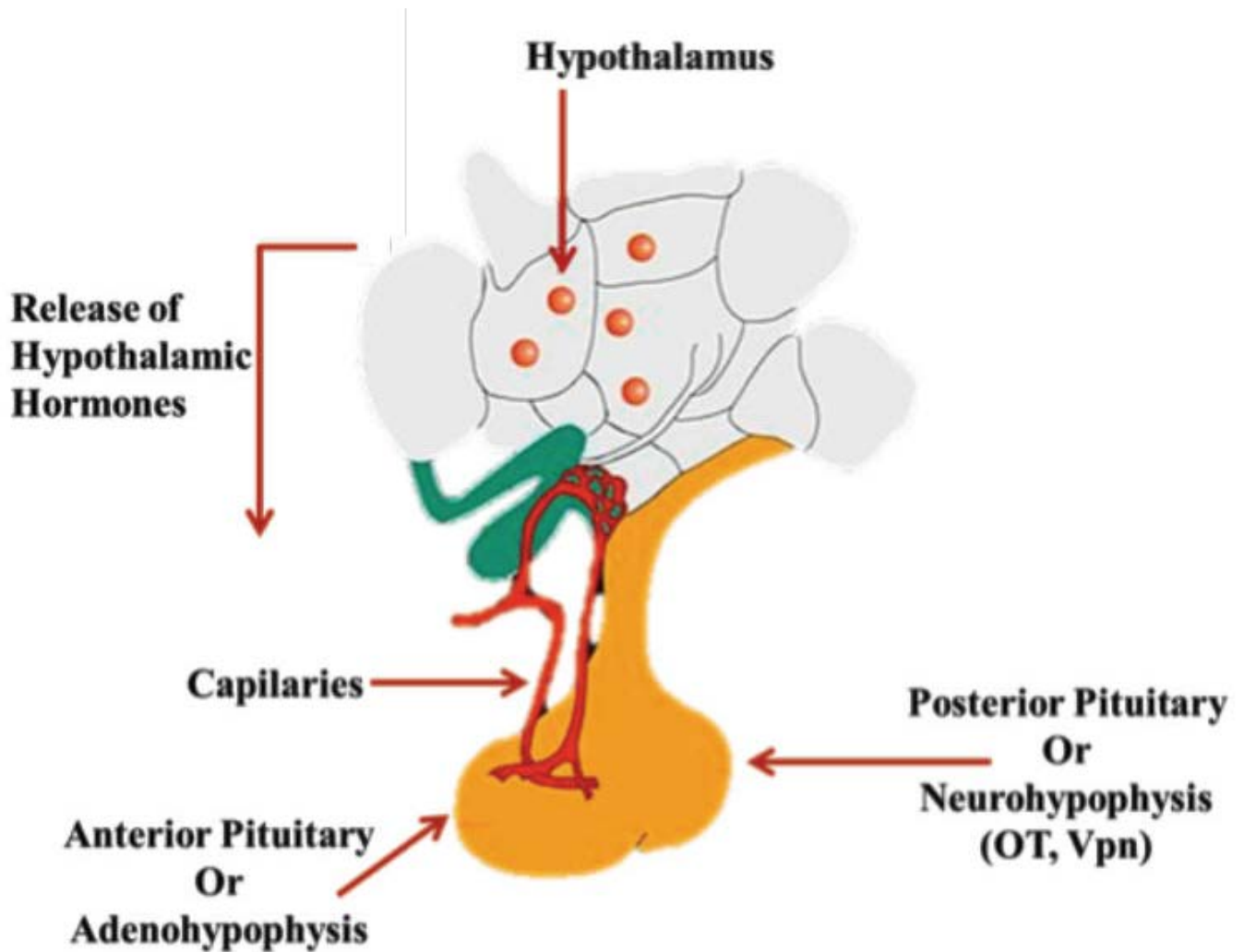


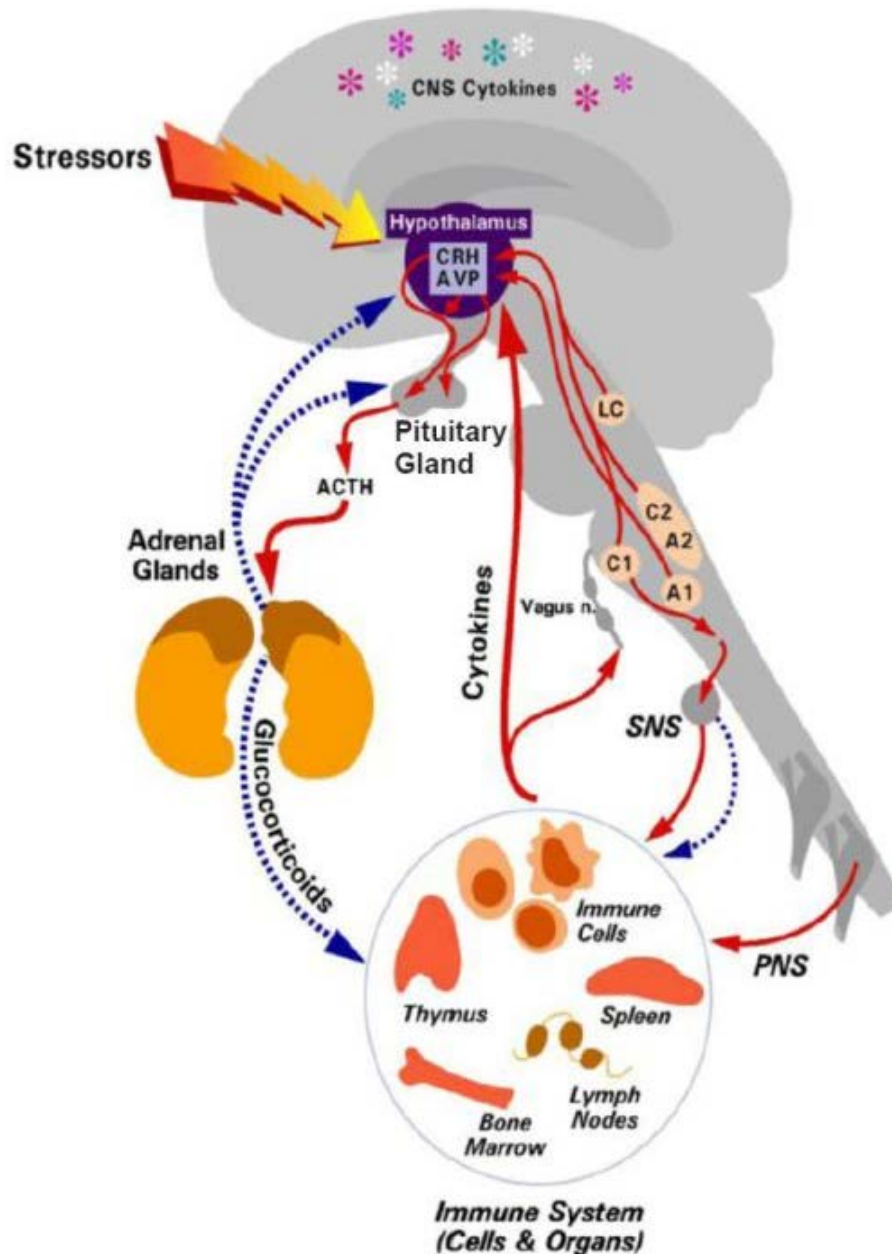


Figure 1.



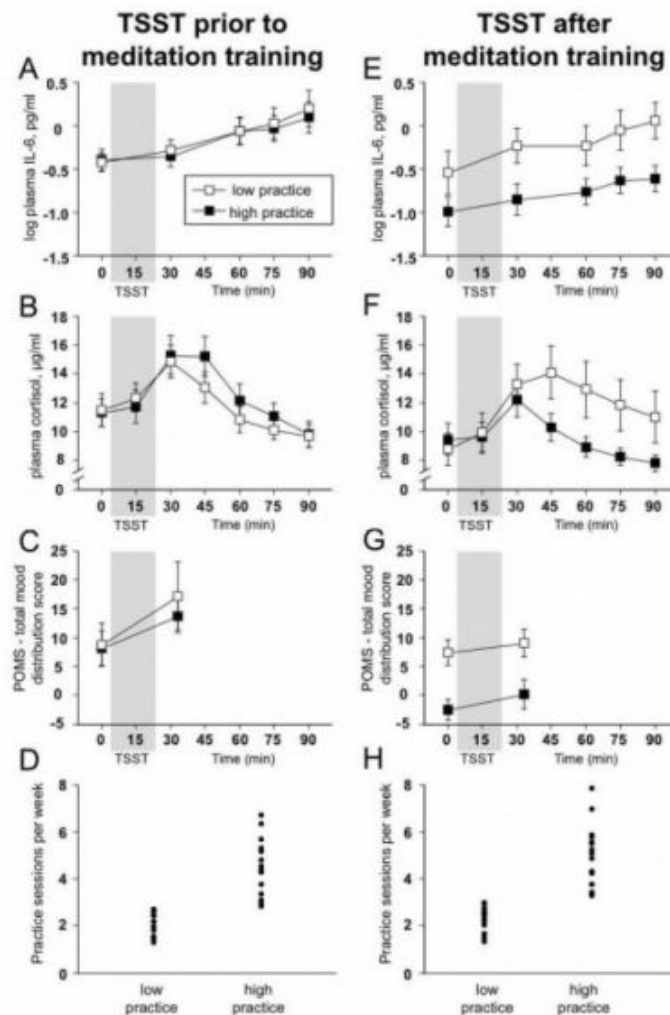
The hypothalamus and pituitary gland. Cell bodies located within the hypothalamus serve as the headgate for the body's hormonal systems and secrete several hormones into the bloodstream via the posterior pituitary (or neurohypophysis), including oxytocin and vasopressin. The hypothalamus also indirectly controls the release of a number of other hormones that are produced by cells located in the anterior pituitary (or adenohypophysis), including adrenocorticotropin hormone and follicle-stimulating hormone.

Figure 2.



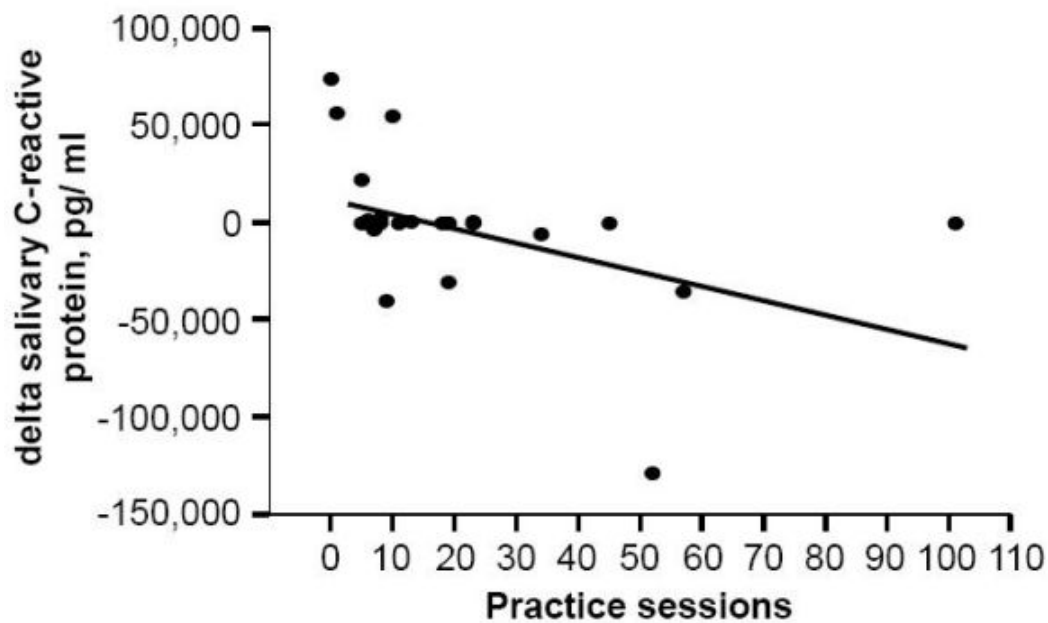
Communication between the brain, endocrine systems and immune system. The hypothalamic-pituitary adrenal (HPA) axis is an essential system in the body's response to stress. Upon challenge with a stressor, higher brain areas including the prefrontal cortex and hippocampus elicit increased activation within the paraventricular nucleus of the hypothalamus. In turn, neurons located within the hypothalamus release corticotropin-releasing hormone (CRH) and arginine vasopressin (AVP) into the portal vein circulation that connects the pituitary gland to the brain. These neurohormones subsequently induce the release of adrenocorticotropin hormone (ACTH) from the anterior pituitary into the general circulation. ACTH eventually reaches the adrenal gland, which causes the production and release of glucocorticoids including cortisol. Stressor exposure also influences select brain stem nuclei, which in turn modulate autonomic outflow. Considerable evidence indicates that both the HPA axis and autonomic nervous system (including sympathetic [SNS] and parasympathetic [PNS] branches) exert powerful effects on the immune system, including inflammatory/innate immune function. Immune system cytokines have been shown to potently affect the brain. For example, cytokines in the context of inflammatory excess are known to play an important role in the development of a number of psychiatric illnesses, including major depression. (Reprinted with permission from Webster, J. I., Tonelli, L., & Sternberg, E. M. (2002). Neuroendocrine regulation of immunity. *Annual Review of Immunology*, 20, 125–163. Copyright 2002 Annual Reviews.)

Figure 3.



Compassion meditation practice optimizes inflammatory, endocrine and subjective distress responses to a psychosocial laboratory stress challenge. Trier Social Stress Test (TSST)-induced plasma interleukin (IL)-6, plasma cortisol and subjective distress responses in high practice and low practice participants challenged with the TSST prior to or after Cognitively-Based Compassion Training (CBCT). High practice and low practice meditation groups challenged with the TSST before CBCT (Panels A – D) and after CBCT (Panels E – H) were formed based on a median split of mean number of practice sessions per week. Regardless of CBCT, challenge with the stressor increased plasma IL-6 (Panels A and E), plasma cortisol (Panels B and F) and distress as measured by the Profile of Mood States (POMS) total score (Panels C and G). In participants who underwent TSST challenge prior to CBCT, IL-6 (Panel A), cortisol (Panel B), and Profile of Mood States (POMS) total score (Panel C), responses to the TSST did not differ between high and low practice groups. In contrast, in participants who underwent TSST challenge after meditation training, IL-6 (Panel E) and POMS total score (Panel G), responses across the TSST procedure were reduced in high practice participants compared to low practice participants. Of note, high and low practice participants with training after the TSST showed comparable amounts of overall practice time compared to high and low practice participants with training before the TSST (Panels D and H). (Reprinted with permission from Pace, T. W. W., Negi, L. T., Sivilli, T. I., Issa, M. J., Cole, S. P., Adame, D. D., & Raison, C. L. (2010). Innate immune, neuroendocrine and behavioral responses to psychosocial stress do not predict subsequent compassion meditation practice time. *Psychoneuroendocrinology*, 35(2), 310–315. Copyright 2010 Elsevier.)

Figure 4.



Cognitively Based Compassion Training (CBCT) practice sessions over the 6-week program were negatively associated with the change in salivary C-reactive protein (CRP) concentrations from before to after CBCT in adolescents in foster care ($r_s = 0.58$, $p = 0.002$). Saliva was collected in the home setting immediately after waking and analyzed for concentrations of CRP. (Reprinted with permission from Pace, T. W. W., Negi, L. T., Dodson-Lavelle, B., Ozawa-de Silva, B., Reddy, S. D., Cole, S. P., Danese, A., Craighead, L. W., & Raison, C. L. (2012). Engagement with cognitively-based compassion training is associated with reduced salivary C-reactive protein from before to after training in foster care program adolescents. *Psychoneuroendocrinology*, 38(2) 294-299. doi:10.1016/j.psyneuen.2012.05.019. Copyright 2012 Elsevier.)





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Chapter 14

Being with Pain

A Discussion of Meditation-Based Analgesia

Pain is a sensory experience but also an interpretation

Pain may not need to be associated with suffering

Meditation seems to reduce pain-related suffering

Joshua A.
Grant



Being with Pain

While they do exist, individuals who lack the capacity to feel physical pain are rare. One might relish the thought of never having to endure another excruciating headache but, ironically, these same individuals do not live long. Pain, while unpleasant, is a necessary signal of threat that is crucial to our ability to avoid harm's way. But why must we suffer in the presence of pain? Would it not be enough to have a warning system that simply alerted us? Interestingly, some 2500 years ago it was suggested that, indeed, the acute aspect of pain, upon which we're dependent for survival, does not necessarily have to be associated with suffering. This teaching is attributed to the Buddha, who spoke about the first and second arrows of pain; the former being the warning signal and the later the unnecessary suffering bestowed upon the individual as a result of their untrained mind[1]. It could be argued that in fact Buddhism has pain to thank for its existence. Allegedly, it was the Buddha's realization that all beings suffer that led him to seek a solution. The result was a series of practices and theories that are still widely used today and which have purportedly evolved to fit the needs of those suffering throughout the ages.

Buddhism seems to be in the midst of another transition, where traditional ideas are making their way West and being scrutinized under the lens of science. The scientific study of pain is certainly not new but has only gained a head of steam in the past two decades. This has coincided with the advent of brain imaging techniques such as MRI, which have allowed scientists to see that pain is more complicated than once thought. Rather than a single center in the brain receiving signals from hurt body parts, an intricate network of interconnected regions underlies our experience of pain. The precise role each area plays is still a matter of some debate. It has only been in the past five years that studies have started to investigate *how* meditative practice may impact pain[2]. As we will see, although the story is far from complete, it echoes the words the Buddha said centuries ago. Over the next few pages I'll distill the current state of scientific knowledge concerning meditation-related pain reduction. In doing so, the link between pain and compassion, from a scientific perspective, should also become clear.

Pain in the Brain

The experience of pain is far from the simple burning or stabbing feeling it seems to be when touching a hot stove or pinching one's finger. It is believed that the experience can be dissociated into several dimensions[3]. The sensory-discriminative dimension allows us to locate the sensation on the body and perceive its strength or intensity. The affective-motivational dimension of pain relates more to the way the offending stimulus makes you feel. That is, pain is nearly always associated with an emotional response. Lastly, there are cognitive-evaluative aspects of pain perception, which are less experiential in nature and more involved in shaping or modulating the experience. For example, anxiety of an upcoming painful stimulus is known to influence how it is eventually perceived[4]. In the brain, activity in a large number of regions underlies our experience of pain, some of which are visible in [Figure 1](#). Generally, the sensory-discriminative aspect of pain is believed to be processed by primary and secondary somatosensory cortices (SI, SII), the thalamus (Thal) and parts of the insula (INS) where brain activity corresponds to participants' ratings of how intense the stimulus was[5]. The affective-motivational dimension of pain is thought to be processed in the anterior cingulate cortex (ACC) and different parts of the INS, where ratings of pain unpleasantness are often found to correspond with brain activity levels[6]. It should be noted that these distinctions are certainly not absolute and, further, that these regions do much more than respond to painful situations, having known roles in general processes such as attention



(ACC). Finally, the PFC is a large region involved in higher cognitive functions such as volition, attention and memory[7], which, in terms of pain, is thought to underlie evaluation, appraisal or memory related to the stimulus[8]. Together, a typical neural response to pain generally involves increased activity of the so-called pain neuro-matrix: SI, SII Thal and INS (reflecting felt intensity), ACC and INS (reflecting felt unpleasantness) and PFC, thought to reflect memory or stimulus evaluation. Additional brain regions are involved in modulating painful experience. The so-called descending modulatory system involves the PFC and deeper brain structures such as the periaqueductal gray and the rostroventral medulla[9]. These areas reduce incoming pain signals by releasing opioids in the brain. We turn now to the question of how meditative practice might influence pain perception.

The Basics: How Concentration-Based Meditation May Influence Pain

There are many formulations of Buddhism and a great number of meditative practices. Common to most lineages is a form of basic training where one learns to wrangle the mind. Such practices are aimed at calming the often overactive mind by teaching one, among other things, to sustain attention. Scientifically these practices are referred to as “concentrative” or “focused attention” meditation techniques[10] (see [box VII](#) and [chapter 11](#)). Given that attention alters the way we perceive things, even these early stages of training may influence pain perception. For example, if attention is firmly directed to one stimulus it can cause others to go unnoticed. Brain imaging studies have shown that stimulus-related brain activity is stronger if one is focused on the stimulus. This holds for pain. Directing one’s attention to a painful stimulus increases brain activity in areas that process these inputs and importantly also increases the experience of pain[11]. Conversely, distraction can effectively reduce pain, but this depends on how strong and persistent the stimulus is[12]. A fascinating case study was published in 2005 of a Yogi who claimed to experience no pain while meditating[13]. Researchers applied painful (but safe) laser stimulation to his hand in a normal waking state and scanned his brain. The procedure was repeated during meditation. Pain-related regions that were active in the normal state were absent in the meditation scans and, fittingly, he reported not having felt the stimulation. The meditation practice employed was not reported but Yogic techniques tend to focus on concentration. One possibility is that he had learned to deploy his attention so fully in his practice that he cut off conscious perception of other events; a kind of volitional distraction. While intriguing, too much weight cannot be given to a case study until it is replicated with a larger sample. Luckily, more modest amounts of practice also seem to influence pain.

Our work suggests that practicing meditation for several years leads to changes in pain perception[14], [15], [16]. In a preliminary study we recruited a group of Zen meditators and an age/gender-matched control group[16]. During the thresholding procedure prior to the experiment it became evident that the meditators were much less sensitive to thermal pain (applied to the leg) than control subjects, requiring much hotter stimuli than controls to report moderate pain. This finding is consistent with a previous study[17] that showed that learning to meditate increases tolerance for cold-induced pain. During the experiment, participants were asked to attend to pain in different ways. The conditions of interest were *concentration*: try to sustain your attention on the stimulus at all times, and *mindfulness*: try to attend moment by moment, without automatic judgment of the experience as negative or painful. As expected, pain reports were significantly increased for control subjects during the concentration condition, whereas meditators showed no change from their own baseline. We speculated that the Zen practitioners may have learned to be more attentive towards their ongoing experiences in general and therefore, when asked explicitly to focus, showed no change. This would be consistent with research showing that people perform attention-demanding tasks with more proficiency after meditative training[18],[19]. However, this would not explain why they were more tolerant of pain to begin with. In fact, one might expect the

opposite. Hypervigilance, a clinical term, is associated with an exaggeration of negative symptoms[20]. Increased attention to the pain, as just posited, should amplify the experience and lower tolerance. Clearly something else must be involved. The mindfulness condition may hold part of the answer.

Being Present: How Mindfulness-Based Meditation May Influence Pain

While concentrative meditation is said to stabilize the mind, an apparent insight of the Buddha was that this was not sufficient to overcome suffering. Rather, he suggested one also needs insight; insight into the idiosyncrasies of the mind, one's behavior and even how one perceives (or doesn't perceive) the world. Enter mindfulness. Being mindful is being aware of what one is doing, while one is doing it; being present. There is a notion of acceptance of things as they are, of simple observation rather than elaborate judgment and reactivity. I believe this mental stance has much to do with why meditators are less sensitive to pain.

Returning to the study I began to describe above, the second condition of interest was mindful attention. This time control subjects reported no difference in pain from their own baseline while meditators reported significantly reduced pain intensity and pain unpleasantness. Importantly, the most experienced meditators had the strongest pain reductions and, as a group, the Zen practitioners scored higher on a questionnaire measuring mindfulness. Given that during mindfulness one places the attention on the experience itself, it is unlikely that the observed pain reductions were due to distraction, as they may have been for the Yogi above. Rather, consistent with descriptions of mindfulness, we suggested that Zen practitioners were better able to follow our instructions of attending in the moment without automatic judgment. In support of our results, a study published the following year found largely similar results in advanced Tibetan meditators[21]. However, unlike the Zen practitioners, Tibetan meditators only showed effects on the affective dimension of pain. We move now to several brain imaging studies that have given us more insight into these effects.

Brain imaging techniques such as functional MRI give one more power to distinguish between competing hypotheses. In terms of meditation and pain, distraction should result in reduced pain reports alongside brain activity reductions. Mindfulness should reduce pain and possibly increase brain activity due to the attention allotted to the stimulus. Thus, our next study used fMRI to measure the brain activity of our two groups during pain[15]. Only two conditions were included; baseline (pay attention normally) and Zazen (Zen meditation). Control participants were instructed were instructed in how to do Zazen one week prior to their scan. The results were quite intriguing. After controlling for the strength of the stimuli (stronger in meditators), we found that pain-related areas were more strongly activated for meditators than for controls during the normal attention condition, despite equivalent pain ratings (Fig. 1 C, D). This finding supports the idea that the meditators were directly focusing on the sensations and not simply distracting themselves. Simultaneously, a whole series of brain regions had dramatically reduced activity for the meditators during pain, but not for the controls (Fig. 1 A, B). These included the amygdala, hippocampus and orbitofrontal, medial-prefrontal and dorsolateral-prefrontal cortices.



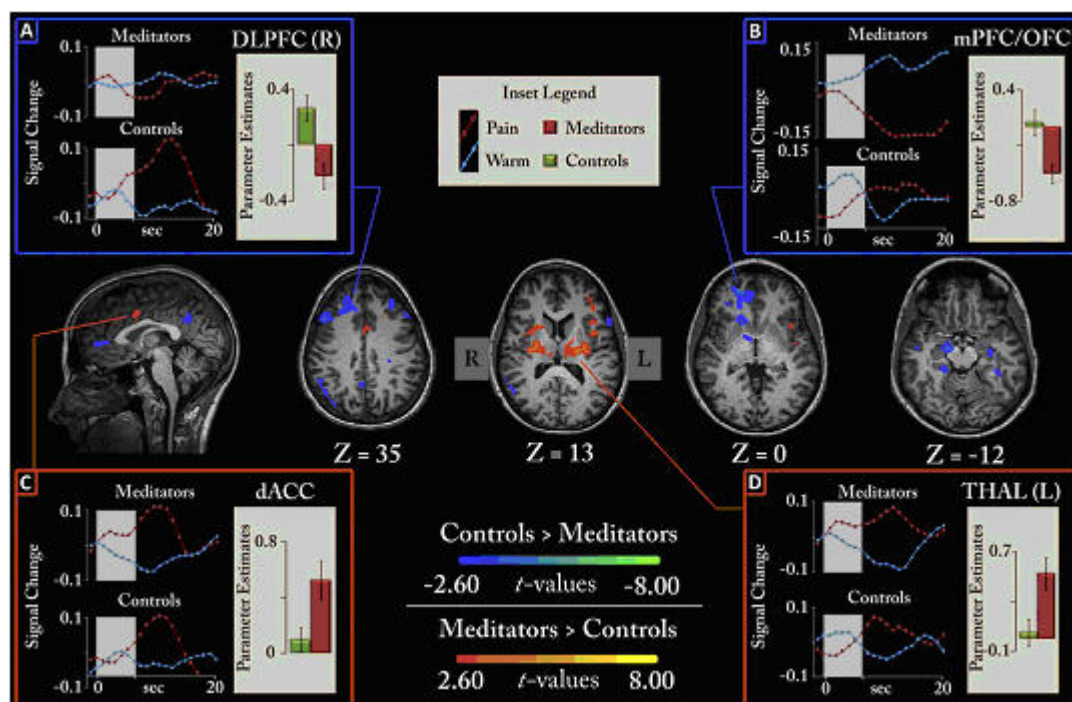


Figure 1. Differences between meditators and non-meditators during pain in a non-meditative state. Central MRI images show brain regions statistically different during pain (orange–yellow: meditators > controls), (blue–green: controls > meditators). Corner insets show average activity levels for each group (right side of each box) as well as the time course of the activity (left side) during pain trials (red) and warm trials (blue) for each group separately. Gray bars represent where the stimulus was presented. A: right DLPFC, B: right med-PFC/OFC, C: left THAL, D: dACC spanning the midline. R = right, L = left.

Taken from Grant J.A., Courtemanche J., Rainville P. A non-elaborative mental stance and decoupling of executive and pain-related cortices predicts low pain sensitivity in Zen meditators.

Pain. 2011 Jan;152(1):150-6. This figure has been reproduced with permission of the International Association for the Study of Pain (IASP). The figure may not be reproduced for any other purpose without permission.

The orbitofrontal cortex is known to receive sensory input (from all modalities) and integrate the relative value or importance for the individual[22]. The amygdala is a key player in processing emotion, most famously fear[23]. The hippocampus is a memory-related structure and works in concert with the dorsolateral-prefrontal cortex, whereas the medial-prefrontal cortex has been implicated in self-referential processing[24]. So what might all this mean?

While many potential explanations certainly exist for these results, the pattern of brain activity maps extremely well onto the concept of mindfulness. First, mindfulness should involve monitoring of the present experience (in this case pain), which would result in activation of the relevant cortices (ACC, INS, SI, etc.). Second, monitoring occurs in the present moment and likely precludes the production of elaborate mental narratives. Thus, one could postulate that this mental stance would not require much in terms of memory or self-related processing, possibly accounting for the hippocampal, dorsolateral- and medial-prefrontal activity reductions. A reduction in memory processing should also limit stimulus evaluation, which necessarily involves comparison of present to past or future. This may explain the orbitofrontal reduction. Finally, if there is less, or no, evaluation and/or elaboration of the stimuli, one may be less likely to have a strong emotional reaction, which could explain the amygdala reduction. While this would be a fitting explanation, given the group being investigated, it is admittedly speculative and will require verification in future studies with some kind of performance-based measures.

One final result from that study is of particular interest. We examined whether the brain areas listed above were active (or inactive) in synchrony with each other during pain and whether this differed between groups. We discovered that, during pain, meditators “functionally” disconnected the PFC (dorsolateral) with a central pain-related region, the ACC. Information is thought to flow between

these regions to guide our ongoing behavior[7]. Importantly, the meditators with the biggest disconnection between these regions were those that required the hottest temperatures to report pain. It is also important to keep in mind that these results are from the baseline condition. This suggests that the meditators can modulate pain “on the fly” and raises interesting predictions as to how their brains look during meditation. Those data are still in the process of being analyzed. Taken together, the results of this study lend some support to ancient Buddhist claims, which posit two aspects of pain: the sensation itself (first arrow) and the suffering that the mind creates as a result (second arrow)[1]. The results also corroborate the claim that through meditative training one can remove the second arrow of pain.

Importantly, studies by several teams appear to support this interpretation, with consistent findings across different meditation traditions. An imaging study of Vipassana meditators also found reduced pain with increased activation of pain-related areas (INS) and decreased lateral frontal activity during pain in a meditative state[25]. A soon-to-be-published study from a group in Wisconsin found strikingly similar results in advanced Tibetan meditators. The story may be a little different for beginning meditators. Following a mere four days of training, previously untrained individuals showed dramatically reduced pain[26]. Activation was decreased in SI, while reduced pain reports correlated with increases in INS, ACC and orbitofrontal cortex (OFC). In a recent review of the meditation/pain literature, we suggested that mindfulness may involve several mechanisms that are partly dependent upon experience level[2]. The pain-area activations (ACC/INS), alongside reduced pain (opposite to typical findings), suggest a novel form of sensory monitoring where the physical properties and aversive nature of the experience are dissociated. We suggested that beginners may accomplish this by reappraising their experience, reflected in the OFC activations, whereas advanced practitioners may actually refrain from appraisal altogether, evidenced by the widespread, but particularly frontal, deactivations. Interestingly, the ACC and INS are known to code stimulus saliency[27], which may indicate that practice enhances certain aspects of the stimuli. Alternatively, these activations may reflect the processes required to carry out the practice itself. Other mechanisms such as reductions in anxiety, fear and anticipation[28] likely also have a role in mindfulness-related pain reduction. Studies attempting to tease apart the mechanisms of meditation-based analgesia are underway in a number of groups around the world.

One implication of the baseline effects our group has observed is that training seems to have lasting effects on a person. This is clearly important if such practices are to be useful in everyday life. MRI also allows us to take detailed images of brain anatomy and quantify different tissues, giving us an index of longer term changes. In a separate study, we measured gray matter thickness in Zen practitioners and controls[14]. The gray matter is the thin sheet of cells covering the outer surface of the brain that does the brain’s computing. We discovered that the meditators also had thicker gray matter in several pain-related brain areas including the ACC. Recall that the ACC played a major role in the functional MRI results explained above. Further, meditators with more experience had thicker gray matter in this region and a thicker ACC was associated with a higher temperature required to report moderate pain. Thus, there is evidence that meditating changes the physical structure of the brain in highly specific ways, which may explain the ability to modulate pain. However, one cannot exclude the possibility that meditators had thicker brains even before they began to practice, although this seems unlikely given the relationship with their level of experience. Further, there is now a report demonstrating change in gray matter following an 8-week meditation program[29]. Following the intervention, participants had gray matter increases in the hippocampus, posterior cingulate, temporo-parietal junction and cerebellum. And now you might ask yourself, wasn’t this chapter supposed to have something to do with compassion?





Compassion: The Saving Grace?

We now know that learning literally sculpts the brain. Meditative practices are no exception and, importantly, Buddhism doesn't end with mindfulness. Insight into interconnectedness, impermanence and the universal nature of suffering is used to foster a sense of compassion. In other chapters you can read about meditative techniques that aim to develop compassion. Remarkably, this state may also reduce the suffering within the compassionate individual! Before we proceed, several more pieces of the puzzle must be in place.

Research has shown that emotional and psychological pain activates similar brain regions as physical pain. Being socially excluded activates ACC and anterior INS in proportion to the participants' reports of distress[30]. Pain-related regions are activated when we view other people in pain[31]. Importantly, we are more likely to *feel* the pain of someone we care about, such as a partner[32] or a fan of the same sports team[33]; people we empathize with. In situations not as conducive to empathy, such as watching a rival fan in pain, there is less such brain activity. In a different area of science it has been proposed that feelings of love, warmth and caring, and the bonds between individuals that these feelings reflect, result from the release of beta-endorphins in the brain[34]. These molecules are members of the opioid family, which underlie and reinforce the rewarding effects of food and drugs. As such, it has been suggested that beta-endorphins originally evolved to reinforce social bonds, crucial for survival in animals[35]. A biological mechanism that *encouraged* individuals to form groups would promote survival and be preserved through evolution. In modern times these bonds may come in the form of a partner, child or even a fellow sports fan. These are the people whose pain we *feel* ourselves, the people we care about, those we're more likely to empathize with or feel compassion towards. If feelings of warmth and caring are indeed associated with beta-endorphin release, it seems reasonable to suggest feelings of compassion, which are described in much the same way, are also related to the natural release of these opioids. There are some very intriguing implications of this possibility.

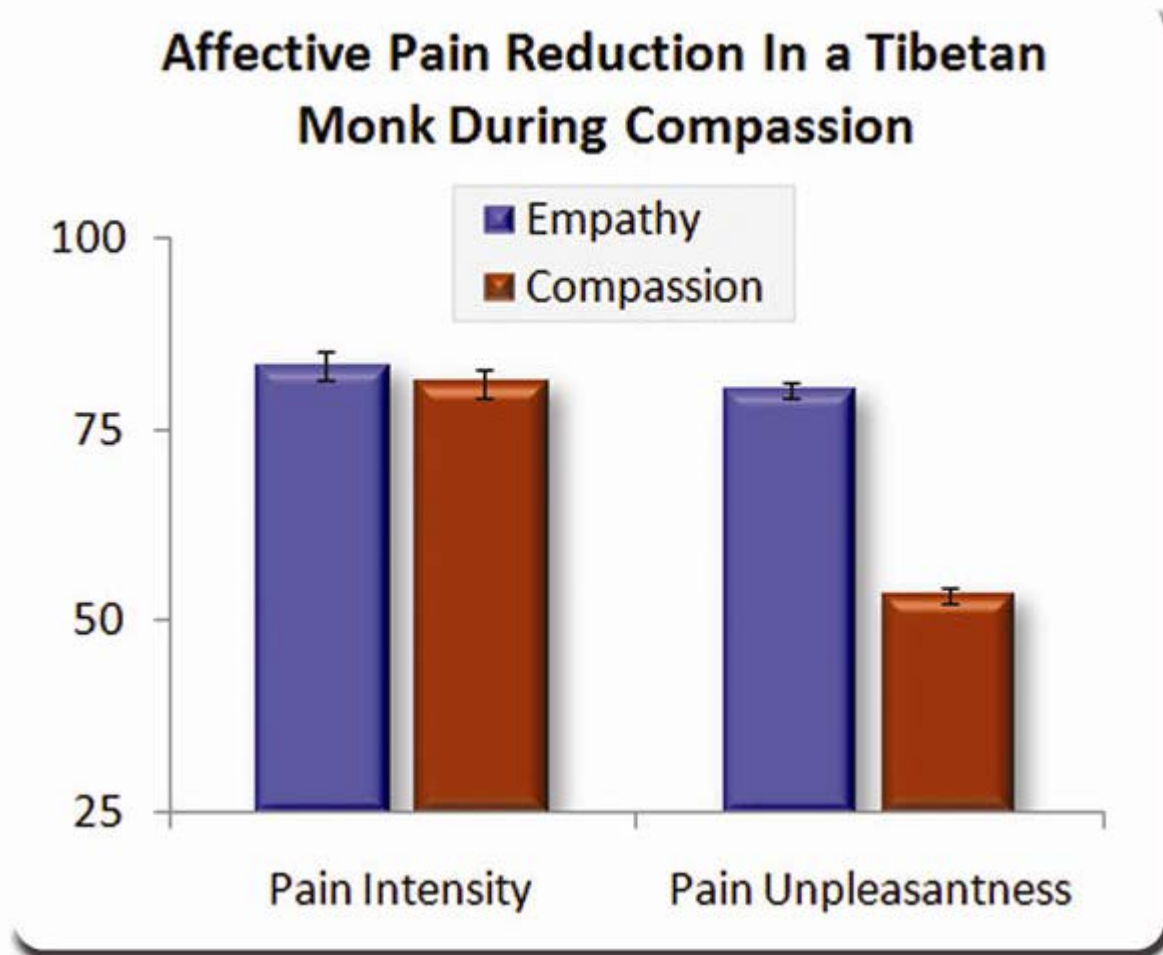


Figure 2. A long-term Tibetan practitioner was asked to enter states of empathy (resonating with the suffering of another) and compassion (generating feelings of warmth and love towards the suffering of another) while receiving pain or viewing another person in pain. There was a selective reduction of the affective dimension of pain during compassion.

As it turns out, opioids are the most powerful painkillers known[36].

Thus, if opioids are released naturally when one is in a state of compassion, it is quite possible that the person would be less afflicted by their own physical, emotional or even vicariously experienced pain. Further, opioids induce pleasurable feelings, hence their role in addiction. A more radical proposition is that compassion may, in a sense, be addictive! As we learn to volitionally generate compassion we may be learning to naturally release opioids. These chemicals would reinforce the compassionate behavior through the positive feelings elicited. Ultimately, this should perpetuate the cycle, as it does mal-adaptively in substance abuse. Importantly, evidence is beginning to show this may actually be the case. Recent work from our lab, and others, suggests that brain regions involved in opioid signaling are active during compassion (see [chapter 13](#))[37], [38], [39]. Further, preliminary unpublished data in an advanced Tibetan monk suggests pain may also be reduced in this state. While generating compassion, which we already know activates opioid areas in this man's brain, pain unpleasantness reports dropped substantially ([figure 2](#)). These results, if they hold for larger samples, will be extremely important. Not only would compassionate behavior lead to a kinder society through increased desire and motivation to help but the individual being compassionate would suffer less in doing so.

To summarize this chapter, concentrative and mindfulness meditation seem to influence pain, but likely through different means. Consistent with ancient claims, attending mindfully seems to reduce pain, possibly through changes in the mental stance the individual takes towards the stimulus[1], purportedly involving less appraisal of one's experience. Compassion offers yet another intriguing

avenue of pain reduction. This other-focus state, potentially propelled by opioids and feelings of warmth, caring and love, would benefit both self and society and may even reinforce itself naturally. This could provide a potential biological explanation for the Buddhist claim that compassion is the path to freedom from suffering. Scientifically, there is certainly much work to be done but early studies suggest meditative practice may be a very promising avenue to reduce pain and suffering.

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Sound Collage

2:14 min

Empathy Versus Compassion

Nathalie
Singer

Chapter 15

Empathy versus Compassion

Lessons from 1st and 3rd Person Methods

Olga
Klimecki



Matthieu
Ricard



Tania
Singer



Empathy is often misunderstood as compassion

Empathy can lead to burnout, compassion can help foster resilience

Empathy and compassion rely on different biological systems and brain networks

Empathy versus Compassion

In this chapter, we will focus on describing what we know about the experiential and neuronal bases of empathy and compassion. However, unlike most neuroscientific literature reviews, which usually adopt an exclusively data-driven third-person perspective, we will also add a first-person approach to the description of empathy and compassion research. More specifically, we will describe how we advanced our understanding of the nature of vicarious emotions and motivations such as empathy and compassion by combining knowledge gained from a first-person, subjective experience of a contemplative long-term practitioner (Matthieu Ricard), on the one hand, and objective empirical findings gained from neuroscientific studies (Tania Singer and Olga Klimecki), on the other hand.

The journey began with the initial contact between Matthieu Ricard, a long-term Buddhist meditation practitioner and former scientist, and Tania Singer, a psychologist and neuroscientist, who was working on the neuronal basis of empathy at the Wellcome Department of Imaging Neuroscience in London. In so-called empathy-for-pain experiments, Tania Singer and her team had devised a paradigm in which the brain activity of participants could be measured with functional magnetic resonance imaging (fMRI) while they either experienced painful stimulation themselves or observed another person receiving painful stimulation (Figure1).



Figure 1. Setup of an “empathy-for-pain paradigm”. The brain activation of the participant lying in the fMRI scanner is measured while he and other persons seated next to the scanner receive painful and non-painful stimulations to the

Ricard had, for instance, cooperated with the scientists Antoine Lutz and Richard Davidson on projects with expert meditators who were compared to novice meditators. In one of these studies, it was found that when immersed in compassionate states while listening to distressed human voices, expert meditators, but not novice meditators, showed enhanced activations in the insula[5]. In a related paper, Antoine Lutz found that activation in the medial insula was associated with heart rate responses and that this association was stronger for experts than for novices[6].

When Tania Singer and her colleagues embarked on plasticity research, they took their first steps in a cooperative project with the University of Maastricht together with Rainer Goebel and Bettina Sorger, who were using an interesting technology: real-time fMRI. This rather novel technology allows for the online visualization of brain activity while subjects, who are lying in the scanner, engage in different mental activities.

To explore the neural signature of an expert compassion meditator during meditation, the researchers asked Matthieu Ricard to immerse himself in different states of compassion: non-referential compassion, compassion for the suffering of others and loving-kindness. To the surprise of the researchers, all of these states elicited activation in rather similar networks. However, these compassion-related networks did not resemble the empathy-for-pain network described above and so frequently observed in meditation-naïve subjects when exposed to the suffering of others. This was puzzling – here they had an expert practitioner in the scanner and all of the states he produced were so different from their expectations. After the scanning session, the researchers discussed with Matthieu Ricard what he was actually doing when engaging in these different compassionate states. During this exchange, the researchers realized that Matthieu was speaking of a warm positive state associated with a strong prosocial motivation rather than a negative distressing state related to sharing pain.

To test the intuition that empathy for the suffering of another may be very different to developing benevolent or compassionate motivation towards others, Matthieu Ricard was scanned again, but this time asked only to engage in emotionally sharing the suffering of others without going into any form of compassion. And here it was: the researchers outside of the scanner witnessed the appearance of the empathy-for-pain network similar to what Tania Singer and other colleagues had observed many times before in non-practitioners.





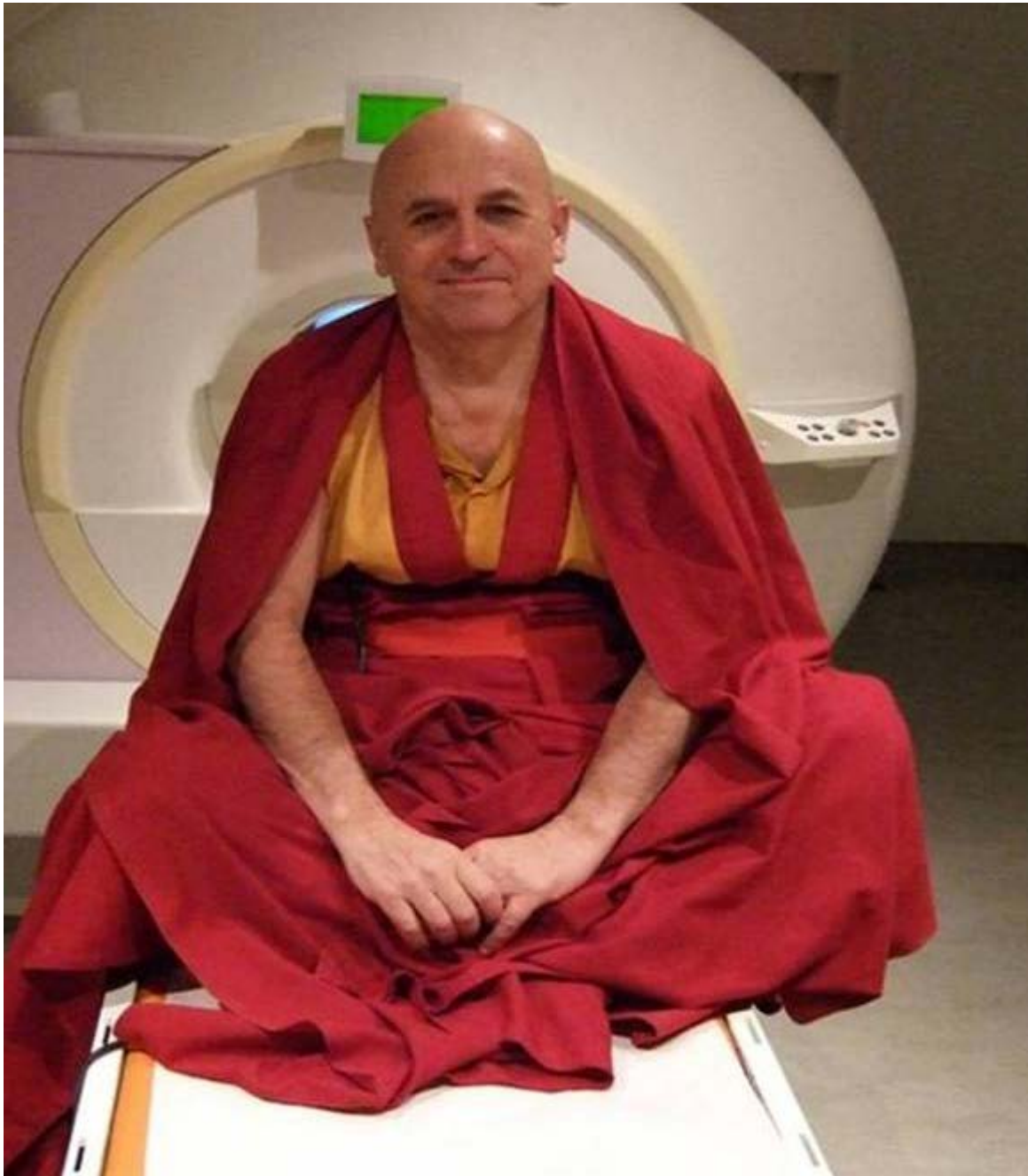


Figure 3. Matthieu Ricard, a long-term meditation practitioner, after a brain scan.



Matthieu Ricard
"First-Person Perspective"

02:36 min

“When Tania Singer asked me to go into a state of pure empathy without engaging in compassion or altruistic love, I decided to empathically resonate with the suffering of children in a Romanian orphanage. I had seen a BBC documentary on these totally neglected orphans the night before and was very touched by their fates. Despite being fed and washed every day, these children were completely emaciated and emotionally abandoned. The lack of affection had caused severe symptoms of apathy and vulnerability. Many children were rocking back and forth for hours and their health was actually in such a bad state that deaths were regular in this orphanage. Even when being washed, many of these children winced with pain and the slightest collision could lead to a broken leg or arm. So when I was immersing myself in empathic resonance, I visualized the suffering of these orphan children as vividly as possible. The empathic sharing of their pain very quickly became intolerable to me and I felt emotionally exhausted, very similar to being burned out. After nearly an hour of empathic resonance, I was given the choice to engage in compassion or to finish scanning. Without the slightest hesitation, I agreed to continue scanning with compassion meditation, because I felt so drained after the empathic resonance. Subsequently engaging in compassion meditation completely altered my mental landscape. Although the images of the suffering children were still as vivid as before, they no longer induced distress. Instead, I felt natural and boundless love for these children and the courage to approach and console them. In addition, the distance between the children and myself had completely disappeared. This was when we realized the immense potential of compassion as an antidote to empathic distress and burnout.”

Empathy and Compassion Training in Non-Experts

Matthieu Ricard’s first-person perspective conveyed that empathic resonance with the suffering of others was a highly aversive experience. Given these properties, empathy can actually be a precursor for burnout: when empathic resonance with suffering repeatedly induces strong negative emotions, this can be overwhelming[7]. People who work in helping professions (see [chapter 6](#), [chapter 12](#) and [Box VI](#)), like caregivers and doctors, are faced with the suffering of others on a daily basis and are at a particularly high risk of burnout. Moreover, distressing experiences are not confined to hospitals and nursing homes – everyone can certainly think of a relative or close friend who at this very moment is suffering from a serious disease or from strong aversive emotions. In fact, everyone can be overwhelmed by resonating too strongly with the suffering of others at their workplaces or in their private lives. Although the strong negative affect that accompanied empathy was alarming, Matthieu Ricard’s first-person perspective also revealed that compassion could help to overcome this pain. From the scientific perspective, compassion seemed to offer a new strategy that enables people to meet suffering with warm-hearted emotions. It actually seemed that compassion would not only benefit the person who felt it by protecting them against burnout, but may also benefit others by increasing helping behavior[8], [9], [10].

And indeed, back in Zurich, the first steps to investigate whether non-experts could be trained in similar loving-kindness enhancing techniques were undertaken. Using a newly developed task, called the Zurich Prosocial Game, the research team measured different types of prosocial behavior in a computer game before and after short-term training in loving-kindness (*metta* in Pali; see [metta meditation in Box VII](#)). The team found that training *metta* for a few days increased helping behavior towards strangers and that altruistic behavior increased more strongly in participants who practiced more loving-kindness[11].

In order to study the plasticity of compassion and to investigate the difference between compassion and empathy in participants who had never meditated before, Tania Singer’s Ph.D. student Olga Klimecki and colleagues embarked on a large-scale project. In the course of the





project, she conducted several short-term intervention studies that focused on the training of empathy or loving-kindness and compassion[12],[13]. To reliably determine training-induced changes in participants' response to the distress of others, Olga Klimecki first developed a video-based task[12]. Using this task, each participant's brain responses were measured while they viewed short documentary video clips depicting people in pain or everyday life situations. After each video, participants reported their positive and negative feelings, as well as their levels of empathy. Consistent with many previous findings on empathy for pain[2], the participants' initial empathic responses to suffering were accompanied by activations in AI and aMCC. Moreover, prior to training, seeing others in pain was associated with elevated levels of negative affect and very low levels of positive affect.

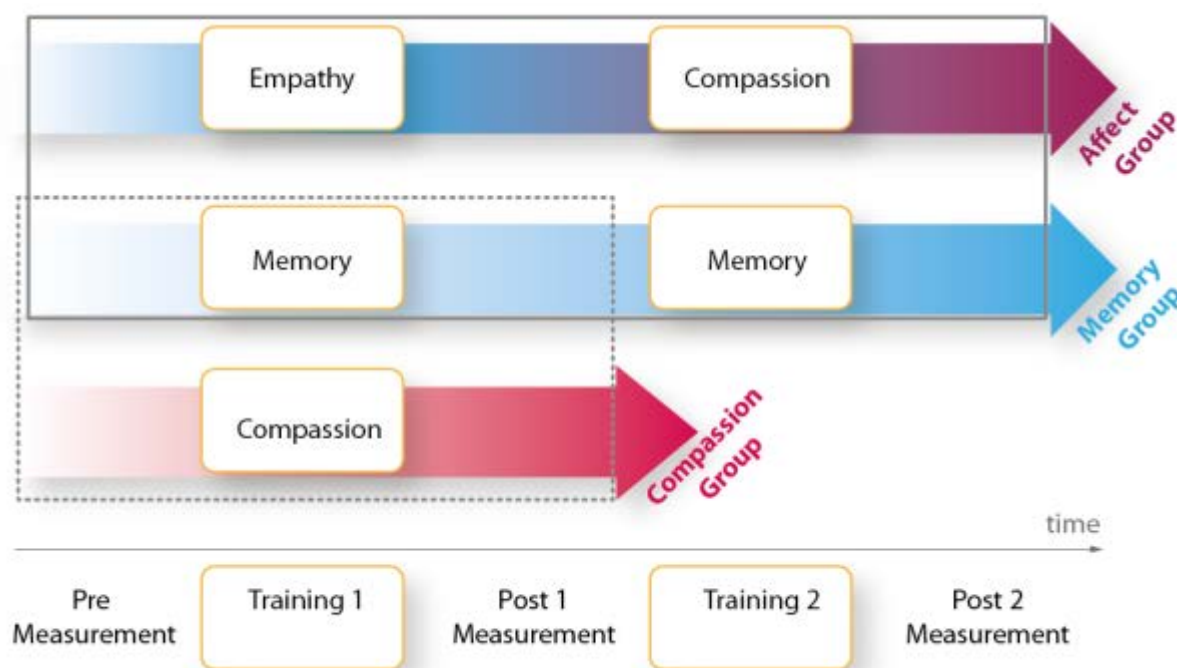


Figure 4. Design of the short-term empathy and compassion intervention studies. Participants were assigned to one of three groups based on their temporal availability: the affect group, the memory group and the compassion group. The dotted lines outline the longitudinal study, which compared the effects of compassion training (N = 28) with a matched memory control group (N = 30; Klimecki et al., 2012). Another study (Klimecki et al., 2013) investigated changes induced through training empathy and compassion (marked by a solid line). To this end, data from the affect intervention (N = 25) group were compared to the memory group (N = 28).

After this first measurement, one group of participants received one day of compassion training, while a matched control group received one day of memory training. The control group was included to control for multiple testing and for unspecific training effects (like training in a group, engaging in mental training over days and being involved in a scientific study). Compassion was trained through loving-kindness meditation[14],[15], which relies on sequentially extending feelings of warmth and benevolence to others (see metta meditation in Box VII).

Memory training focused on the Method of Loci, which improves one's ability to memorize sequences of words by associating them with particular locations. To maintain the training effects, both interventions were complemented by additional practice sessions. The comparison of training effects revealed that compassion training specifically increased self-reports of positive affect, even in response to the distress of others (Figure 5). This is remarkable given that the cultivation of compassion induced a positive attitude, which even extended to stimuli showing others suffering. This change in quantitative ratings after each video was paralleled by qualitative first-person reports collected after compassion training in which participants described "the feeling of warmth;

the wonderful, fulfilling feeling of wishing others well; and a feeling of happiness that arises". At the same time, compassion training did not decrease negative affect, which might be a prerequisite for helping behavior: realizing that someone is in need is a necessary first step to taking appropriate action. On the neural level, we observed that compassion training, but not memory training, increased activations in a network previously observed in cross-sectional compassion studies[5],[16],[17], and in brain regions related to positive affect[18] and affiliation[19] as well as maternal and romantic love[20],[21]. This network spans the medial orbitofrontal cortex, the putamen and pallidum and the ventral tegmental area/substantia nigra (Figure 5). Importantly, compassion-related activations in this network were also observed in two other compassion training studies and in the expert practitioner Matthieu Ricard when he immersed himself in different compassionate states (loving-kindness, compassion for suffering and unconditional compassion).

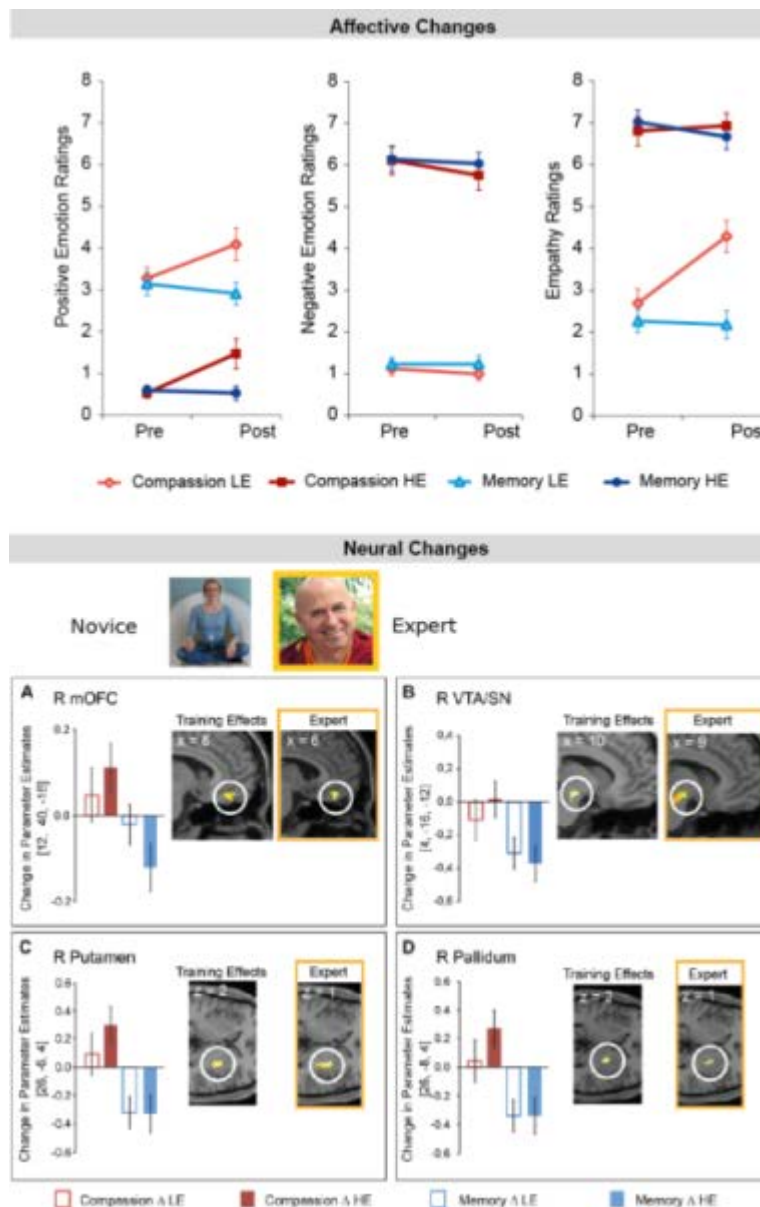


Figure 5. Effects of compassion training. (**Upper Panel**) Self-report changes related to compassion training (red) and memory training (blue). Compassion training, but not memory training, increased self-reported positive affect in response to videos showing people in distress (high emotion, HE) and to videos showing people in everyday life situations (low emotion, LE). No changes were observed for negative affect ratings. Compassion training also increased empathy ratings for LE videos. (**Lower Panel**) Neural activation changes in response to others suffering (HE videos) induced through compassion training occurred in (A) the right medial orbitofrontal cortex, mOFC, (B) the right ventral tegmental area/substantia nigra, VTA/SN, (C) the right pallidum and (D) the right putamen. Bar charts show the change in parameter estimates for the training groups in the depicted independent region of interest; error bars denote the standard errors of the mean. Orange boxes show neural activations of an expert practitioner immersed in three compassionate states to a high as compared to a low degree. (Klimecki et al., 2012, with permission)

These findings suggest that the cultivation of compassion engages a neural network that is distinct from activations found in previous empathy studies focusing on sharing the pain of others. In order to investigate whether empathy and compassion can be distinguished on a neural level, we conducted a short-term intervention study in which the same group of participants was first trained in empathy and, only after a subsequent test, received compassion training[13]. In order to control for unspecific training effects, the changes in this group were compared with the memory control group. On the level of self-reports, training empathic resonance increased negative affect and empathy. Remarkably, negative affect was increased in response to both people in distress and even to people in everyday life situations. In other words, empathy training increased the propensity to react to normal everyday situations with negative affect. On the neural level, empathy training increased activations in AI and aMCC – as described above, regions which have repeatedly been involved when meditation-naïve participants empathized with the suffering of others. This suggests that the sensitization to suffering observed on the level of self-reports was paralleled in the brain. Together, these findings underline the belief that engaging in empathic resonance is a highly aversive experience and, as such, can be a risk factor for burnout. Fortunately, the subsequent compassion training could reverse these effects by decreasing negative affect back to baseline and – like in the first study – by strengthening positive emotions. It is notable that compassion again induced this combination of strong positive affect along with normal levels of negative affect. This emphasizes that compassion does not lead to the denial of suffering but enables people to experience positive emotions, in spite of another person's difficulty. On the neural level, compassion induced entirely different activations than did empathy. These activations occurred in medial orbitofrontal cortex, ventral striatum and pregenual anterior cingulate cortex, which together form a network related to positive emotions[18], affiliation and love[19], [20], [21] and reward[22].

In summary, bridging first- and third-person perspective in research with an expert meditator and novice meditators helped to dissociate empathy and compassion as two distinct social emotions and motivations. During the initial investigation of empathy in an expert meditator, Matthieu Ricard's self-reports and the comparison of his brain activation with previous findings in non-meditation experts yielded crucial insights. These findings led to the formulation of a model that conceptualized empathy and compassion as two very distinct inner states with potentially very different consequences for subjective well-being and health. Pursuing this line of research in a training study with novice meditators helped to put this intuition on solid scientific ground. Here, quantitative and qualitative first-person self-reports elucidated how feeling states changed through training empathy or compassion. These self-reports also shed light on the relationship between emotions and observed neural activations. We thus saw that empathy was accompanied by negative affect and stronger activations in neural areas involved in negative affect and empathy for pain. Generally, compassion training strengthened positive affect, prosocial behavior and neural activity related to affiliation, love, and positive emotions. It therefore seems that while empathic resonance may lead to empathic distress, compassion offers a trainable strategy for increasing prosociality and overcoming adverse experiences by strengthening resilience.

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Sound Collage

2:55 min

Burn-Out and Empathic Distress

Nathalie
Singer

Chapter 16

Being Kind to Yourself

The Science of Self-Compassion

Feeling good about yourself does not require feeling better than others

Being compassionate to yourself is a powerful source of emotional resilience

Self-compassion leads to greater motivation and personal flourishing

Kristin
Neff



Christopher
Germer



Being Kind to Yourself

How do you typically react to difficulties in life – stress, feeling rejected, physical problems, a major failure at work? As human beings, most of us instinctively fight negative experiences and find fault in ourselves when things go wrong: “This shouldn’t be happening!” “What’s the matter with me!?” Unfortunately, this tendency just adds insult to injury. But what would happen if, instead, you took a moment to calm and comfort yourself when you felt bad, just *because* you felt bad – much like you’d do for a friend or a loved one? In other words, what if you practiced the art of *self-compassion*?

Self-compassion can be learned by anyone, even those who didn’t receive enough affection in childhood or who find it embarrassing to be kind to oneself. It’s actually a courageous mental attitude that stands up to harm – the harm that we inflict on ourselves every day by beating ourselves up, pushing ourselves too hard, and holding ourselves to unrealistic standards of perfection. Self-compassion gives us emotional strength and resilience, allowing us to recover more quickly from bruised egos so we can admit our shortcomings, forgive ourselves, and respond to ourselves and others with care and respect. After all, making mistakes is part of being human. Self-compassion also provides the support and inspiration required to make necessary changes in our lives and reach our full potential.

This chapter will first consider what self-compassion is and what it is not, and then review the scientific evidence for the benefits of cultivating self-compassion.

What is Self-Compassion and Why Do We Need It?

Compassion involves sensitivity to the experience of suffering, coupled with a deep desire to alleviate that suffering[1]. *Self-compassion* is simply compassion directed inward. Drawing on the writings of various Buddhist teachers[2], Neff has operationalized self-compassion as consisting of three main elements: kindness, a sense of common humanity, and mindfulness [3]. These components combine and mutually interact to create a self-compassionate frame of mind. Self-compassion is relevant when considering personal inadequacies, mistakes and failures, as well as when confronting painful life situations that are outside of our control.

Self-Kindness

Western culture places great emphasis on being kind to our friends, family and neighbors who are struggling. Not so when it comes to ourselves. When we make a mistake or fail in some way, we may be more likely to beat ourselves up than put a supportive arm around our own shoulder. And even when our problems stem from forces beyond our control, such as an accident or traumatic event, we often focus more on fixing the problem than calming and comforting ourselves. Self-kindness counters this tendency so that we are nurturing, understanding and sympathetic towards ourselves when noticing personal shortcomings rather than being harshly critical. Self-compassion is expressed in internal dialogs that are benevolent and encouraging rather than cruel or disparaging. Instead of attacking and berating ourselves for being inadequate, we offer ourselves warmth and unconditional acceptance. Similarly, when external life circumstances are challenging and difficult to bear, self-compassion involves active self-soothing and support[3].





Common Humanity

A sense of common humanity is central to self-compassion and involves recognizing that all humans are flawed works-in-progress; everyone fails, makes mistakes and engages in dysfunctional behavior. Often, however, we feel isolated and cut off from others when considering our struggles and personal shortcomings, irrationally reacting as if failure and pain were aberrations. This isn't a logical process, but a kind of tunnel vision in which we lose sight of the larger human picture and focus primarily on our own seemingly feeble and worthless selves. Similarly, when things go wrong in our external lives through no fault of our own, we often assume that other people are having an easier time of it, that our own situation is abnormal or unfair. We feel cut off and separate from other people who are presumably leading "normal" happy lives. With self-compassion, however, our outlook becomes broad and inclusive, recognizing that life's challenges and personal failures are simply part of being human. This helps us to feel more connected and less isolated when we are in pain.

Mindfulness

Mindfulness is awareness of present moment experience in a clear and balanced manner[4]. It involves being "experientially open" to the reality of the present moment, allowing whatever thoughts, emotions and sensations enter awareness without judgment, avoidance or repression[4]. Why is mindfulness an essential component of self-compassion? First, it is necessary to recognize you're suffering in order to give yourself compassion. While it might seem that suffering is blindingly obvious, many people don't acknowledge how much pain they're in, especially when that pain stems from their own inner self-critic. Or when confronted with life challenges, people often get so lost in problem-solving mode that they don't pause to consider how much they are struggling in the moment. Mindfulness counters the tendency to avoid painful thoughts and emotions, allowing us to hold the truth of our experience even when unpleasant. At the same time, being mindful means that we don't become "overidentified"[3] with negative thoughts or feelings, so that we are caught up and swept away by our aversive reactions[4]. This type of rumination narrows our focus and exaggerates implications for self-worth. Not only did I fail, "I AM A FAILURE". Not only was I disappointed, "MY LIFE IS DISAPPOINTING". When we observe our pain mindfully, however, we can acknowledge our suffering without exaggerating it, allowing us to take a wiser and more objective perspective on ourselves and our lives.

Although mindfulness is required to experience self-compassion, it is important to recognize that the two constructs are not exactly the same. First, the type of mindfulness entailed in self-compassion is narrower in scope than mindfulness more generally. The mindfulness component of self-compassion refers to balanced awareness of the *negative* thoughts and feelings involved in personal suffering. Mindfulness in general refers to the ability to pay attention to any experience – positive, negative or neutral – with acceptance and equanimity. Another distinction between mindfulness and self-compassion lies in their respective targets[5]. Mindfulness tends to focus on one's internal *experience* (sensations, emotions, thoughts) rather than oneself as the *experiencer*. For example, in the case of lower back pain, mindful awareness might be directed at the changing pain sensations, perhaps noting a stabbing, burning quality, whereas self-compassion would be aimed at the person who is suffering from back pain (see also [chapter 14](#)). Self-compassion emphasizes soothing and comforting the "self" when distressing experiences arise, remembering that such experiences are part of being human.

Research on Self-Compassion

Self-Compassion and Well-Being

A large body of research indicates that self-compassion enables people to thrive[6]. Much of this research has been conducted using the Self-Compassion Scale[7], a 26-item scale that measures the various dimensions of self-compassion: self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus over-identification. (To calculate your own self-compassion score using the scale.).

Increasingly, however, researchers are also using methods like mood inductions[8],[9], behavioral observations[10] or short-term interventions[11] as a means of examining the impact of self-compassion on well-being.

One of the most consistent findings in the research literature is that greater self-compassion is linked to less anxiety and depression. In fact, a recent meta-analysis[12] found a large effect size when examining the link between self-compassion and psychopathology across 20 studies. Of course, a key feature of self-compassion is the lack of self-criticism, and self-criticism is known to be an important predictor of anxiety and depression[13]. However, self-compassion offers protection against anxiety and depression when controlling for self-criticism[7]. Neff, Kirkpatrick and Rude[14] conducted a study that involved a mock interview task in which participants were asked to write their answer to a difficult interview question: "Please describe your greatest weakness". Individuals with higher levels of self-compassion experienced less anxiety after the task. Self-compassionate people have also been found to ruminate much less than those who lack self-compassion[7], presumably because they can break the cycle of negativity by accepting their human imperfection with kindness. A study by Raes[15] found that rumination mediated the association between self-compassion and depression and anxiety, suggesting that reduced rumination is one of the key benefits of self-compassion. There may be physiological processes underlying the buffering effects of self-compassion: Rockcliff et al.[16] found that an exercise designed to increase feelings of self-compassion reduced levels of the stress hormone cortisol and increased heart-rate variability, which is associated with a greater ability to regulate emotions (e.g., self-soothing when stressed)[17].

Interestingly, although self-compassionate people are less likely to be overwhelmed by negative emotions, they're also more willing to experience difficult feelings and to acknowledge them as valid and important[7],[14]. The beauty of self-compassion is that instead of replacing negative feelings with positive ones, new positive emotions of care and connectedness are generated by *embracing* the negative ones, so that both are experienced simultaneously (see also chapter 15). Not surprisingly, then, self-compassion is also strongly linked to positive emotions like happiness, satisfaction with life, optimism, curiosity, enthusiasm, interest, inspiration and excitement[18].

Self-Compassion versus Self-Esteem



Kristin Neff
"Self-Compassion versus Self-Esteem"

02:28 min

Because they can seem similar on the surface, it's important to distinguish self-compassion from self-esteem. Self-esteem refers to the degree to which we evaluate ourselves positively. In American culture, having high self-esteem means standing out in a crowd – being special and





above average. There is general consensus that self-esteem is essential for good mental health, while the lack of self-esteem undermines well-being by fostering depression, anxiety and other pathologies[19]. There are potential problems with high self-esteem, however, not in terms of having it, but in terms of how you get it and keep it. Research increasingly shows that people may engage in dysfunctional behaviors in order to obtain a sense of high self-worth, such as prejudice, narcissism or putting others down[20]. Self-esteem also tends to be contingent on particular outcomes such as being smart, attractive or popular, and it fluctuates up and down according to our latest success or failure[21]. In contrast, self-compassion is not based on positive judgments or evaluations – it is a way of *relating* to ourselves. People feel compassion for themselves because they are human beings, not because they are special or above average. This means that with self-compassion, you don't have to feel better than others to feel good about yourself. Self-compassion also offers more emotional stability than self-esteem because it is always there for you – when you're on top of the world and when you fall flat on your face.

Research indicates that trait levels of self-esteem and self-compassion are moderately correlated[7]. This is unsurprising given that both constructs represent a positive emotional stance towards the self. Similarly, self-esteem and self-compassion are both associated with emotional well-being – for instance, less anxiety and depression, as well as more happiness, optimism and life satisfaction. Unlike self-esteem, however, the healthy states of mind associated with self-compassion do not depend on positive evaluations of the self, on meeting set standards or on favorable comparisons with others. Rather, they stem from recognizing the need to be kind to oneself in instances of suffering and framing one's experience in light of the shared human experience – fragile and imperfect as it is.

Self-compassion appears to provide emotional resilience over and above that attributable to self-esteem. For example, when controlling for self-esteem, self-compassion is still a robust (negative) predictor of depression and anxiety[7], and of happiness, optimism and positive affect[22]. And while high self-esteem depends on successful performances and positive self-evaluations, self-compassion is relevant precisely when self-esteem tends to falter – when one fails or feels inadequate. In the Neff, Kirkpatrick and Rude[14] mock interview study asking people to describe their greatest weakness, for instance, self-compassion provided a buffer against anxiety while trait self-esteem did not.

Leary et al.[9] found that when considering hypothetical scenarios involving failure or embarrassment (e.g., being responsible for losing an athletic competition for their team), participants with greater self-compassion reported less negative affect (e.g., sadness or humiliation) and more emotional equanimity (e.g., remaining calm and unflustered). In contrast, global levels of trait self-esteem predicted no variance in outcomes after controlling for self-compassion levels. In another study, participants were asked to give a brief introduction of themselves on video (describing interests, future plans, etc.), and were then given positive or negative feedback about the introduction that was ostensibly made by an observer. Participants' reactions to the feedback were then assessed, including their attributions for the observer's feedback. Individuals with low self-compassion gave defensive attributions – they were more likely to attribute the observer's feedback to their own personality when the feedback was positive rather than negative. High self-compassion individuals, however, were equally likely to attribute the feedback to their personality regardless of whether the feedback was positive or negative. An opposite pattern was found for self-esteem. Low self-esteem individuals were equally likely to attribute the feedback to their personality when feedback was positive or negative, but high self-esteem participants were more likely to attribute the feedback to their own personality when the feedback was positive rather than negative. This suggests that self-compassion enables people to admit and accept that there are negative as well as positive aspects of their personality. The

maintenance of high self-esteem is more dependent on positive self-evaluations, and therefore may lead to cognitive distortions in order to preserve positive self-views[23].

In a survey involving a large community sample in the Netherlands, self-compassion was shown to be a stronger predictor of healthy functioning than self-esteem[22]. Self-compassion was associated with more stability in state feelings of self-worth over an eight-month period (assessed 12 different times) than trait self-esteem. This may be related to the fact that self-compassion was also found to be less contingent on things like physical attractiveness or successful performances than self-esteem. Results indicated that self-compassion was associated with lower levels of social comparison, public self-consciousness, self-rumination, anger and need for cognitive closure than self-esteem. Also, self-esteem had a robust association with narcissism while self-compassion had no association with narcissism. These findings suggest that, in contrast to those with high self-esteem, self-compassionate people are less focused on evaluating themselves, feeling superior to others, worrying about whether or not others are evaluating them, defending their viewpoints or angrily reacting against those who disagree with them. In sum, self-compassion is a healthier way of feeling good about oneself than self-esteem that is based on the need to feel better than others.

Self-Compassion and Motivation

Many people think that they need to be self-critical to motivate themselves – that if they're too self-compassionate they'll be complacent and lazy. Although constructive and supportive self-criticism is certainly helpful (and is part of being kind to oneself), harsh and belittling self-criticism is not: it tends to make people depressed and lose self-confidence[24]. Research shows that self-compassion is linked to enhanced motivation to learn and grow. In a study of self-compassion and learning goals, Neff, Hsieh and Dejithirath[25] found that compassion for the self was associated with mastery rather than performance goals. Students with a mastery orientation towards learning are intrinsically motivated by curiosity and the desire to learn new skills, and tend to view the making of mistakes as a part of the learning process. Students with a performance orientation, on the other hand, are extrinsically motivated to succeed as a means of defending or enhancing their sense of self-worth, and tend to fear failure[26]. Neff et al.[25] demonstrated that self-compassion is positively associated with mastery goals and negatively associated with performance goals, a relationship that is mediated by the lesser fear of failure and greater perceived competence of self-compassionate individuals (which is likely related to lessened self-criticism). They also examined the reactions of students who had recently failed a midterm exam, and found that self-compassionate individuals were more able to cope with and accept their failure as a learning experience. Rather than being complacent and merely accepting the status quo, it appears that self-compassion enables people to grow from their failures because they don't interpret failure as an indictment of their self-worth.

Self-compassion has no association with the level of performance standards adopted for the self, but it is negatively related to maladaptive perfectionism[7]. In other words, self-compassionate people aim just as high as those who lack self-compassion, but don't become as distressed and frustrated when they can't meet their goals. They are also more likely to pick themselves up and try again after failing[27]. Self-compassion has been found to promote health-related behaviors such as sticking to one's diet[28], quitting smoking[29] and starting a physical fitness regime[30]. Self-compassionate people are motivated to make productive changes in their lives not because they are unacceptable as they are, but because they care about themselves and want to be happy and healthy.

Self-compassionate people are also more likely to take responsibility for past mistakes and to apologize when they have hurt someone[9],[31]. For instance, a recent study by Breines and





Chen[8] asked undergraduate students think about a recent moral transgression that they regretted and felt guilty about. One group of participants were then told to write something “kind and understanding” about what happened, another were told to “think about your positive qualities” and another group were told simply to write about their favorite hobbies. The group given instructions to be self-compassionate were significantly more motivated to repair any harm caused by the transgression and committed not to repeat the mistake again than the other two groups.

It’s easier to see oneself clearly and own up to past misdeeds when this type of honesty is met with kindness and self-acceptance rather than harsh self-condemnation.

Self-Compassion and Coping

Self-compassion can be seen as an effective way to cope with difficult emotional experiences. For instance, Sbarra, Smith & Mehl[10] found that self-compassion was key in helping people adjust after divorce. Researchers asked divorcing adults to complete a 4-minute stream-of-consciousness recording about their separation experience, and independent judges rated how self-compassionate their dialogs were. Those who displayed greater self-compassion when talking about their break-up not only evidenced better psychological adjustment at the time, but this effect persisted over nine months. Findings were significant even after accounting for a number of competing predictors such as self-esteem. Research also indicates that self-compassion helps people cope with early childhood traumas. In a youth sample, Vettese, Dyer, Li and Wekerle[32] found that self-reported levels of self-compassion mediated the link between childhood maltreatment and later emotional dysregulation. This suggests that people with trauma histories who have compassion for themselves are better able to deal with upsetting events in a productive manner. Self-compassion also appears to help people cope with chronic physical pain, allowing them to maintain emotional balance and function better in daily life[33].

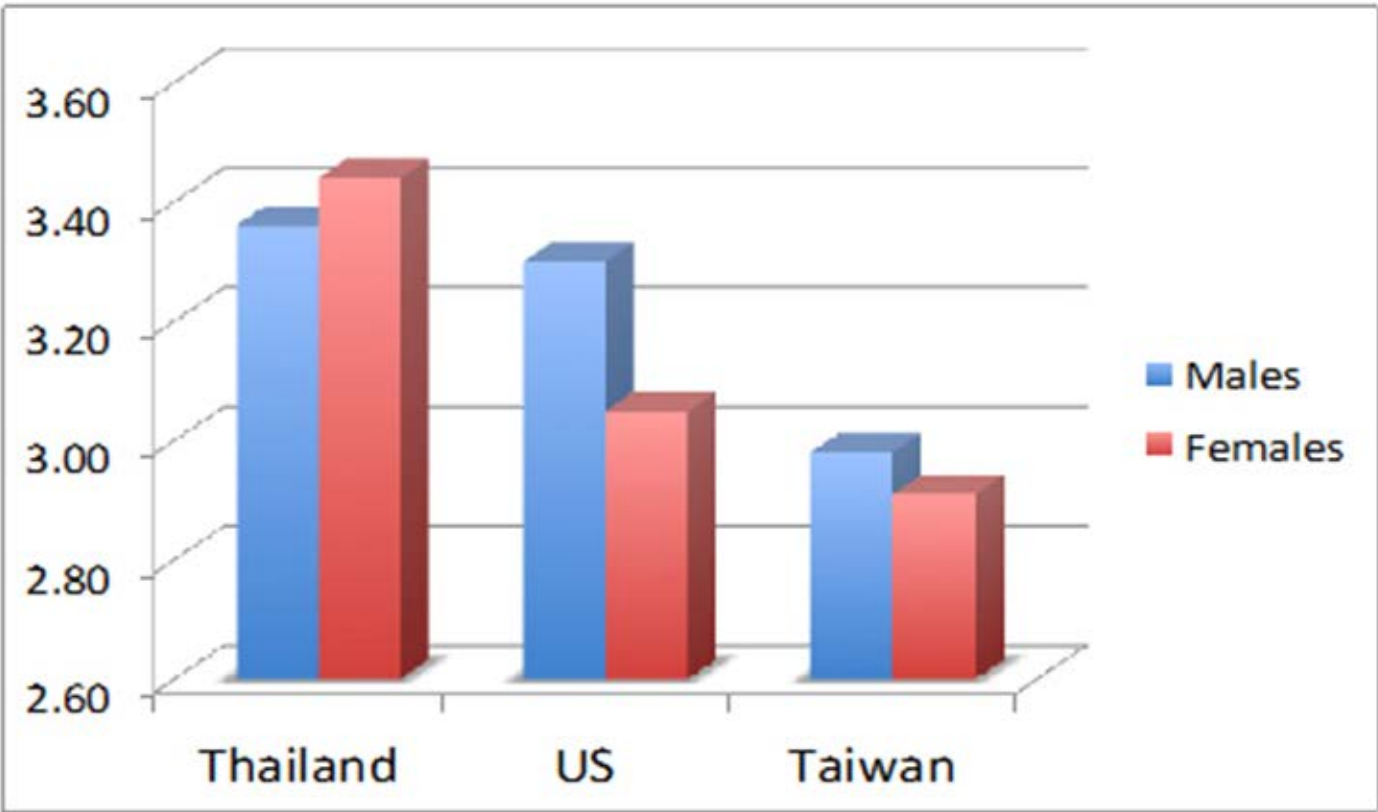


Figure 1. Cross-cultural differences in Self-compassion

Self-Compassion and Culture

There has been a small amount of research exploring whether self-compassion levels differ across cultures. Neff, Pisitsungkagarn and Hsieh[34] examined self-compassion, independent and interdependent self-construal, and psychological well-being in Thailand, Taiwan and the United States. Mean self-compassion levels were highest in Thailand and lowest in Taiwan, with the United States falling in between. (All cultures differed significantly from one another, although within-culture variations in self-compassion were as great as between-culture variations).

These cross-cultural differences may be explained by the fact that Thais are strongly influenced by Buddhism and the value of compassion is emphasized in parenting practices and everyday interactions in Thailand. In contrast, the Taiwanese are more influenced by Confucianism, and shame and self-criticism is more strongly emphasized as a means of parental and social control in Taiwan. Americans may have reported in-between self-compassion levels because the culture displays more mixed messages with regard to self-compassion (e.g., a strong emphasis on positive self-affect but also an isolating, competitive ethos.) Although Thais had the highest levels of self-compassion, Americans had the highest levels of self-esteem. In all three cultures, however, greater self-compassion significantly predicted less depression and greater life satisfaction, suggesting that there may be universal benefits to self-compassion despite cultural differences in its prevalence.

Self-Compassion and Interpersonal Relationships

While there is evidence that self-compassion psychologically benefits the individual, there is also evidence that self-compassion enhances interpersonal relationships. In a study of heterosexual couples[35], for instance, self-compassionate individuals were described by their partners as being more emotionally connected, accepting and autonomy-supporting while being less detached, controlling and verbally or physically aggressive in their relationship than those lacking self-compassion. Self-compassionate people also appear to have more compassion for others. A recent study by Neff and Pommier[36] found that self-compassionate people reported feeling higher levels of empathetic concern, forgiveness and altruism towards others than those who lacked self-compassion, and they were also less likely to experience personal distress when considering others' suffering. This suggests that self-compassion may be an important skill to teach caregivers, especially since it has been found to be a protective factor against caregiver burnout[37].

Self-Compassion in Clinical Contexts

An exciting area of research concerns the implications of self-compassion for clinical practice. People who lack self-compassion are more likely to have critical mothers, come from dysfunctional families and display insecure attachment patterns than self-compassionate people do[38]. Given that therapy clients often have problems related to their family backgrounds, they may be especially likely to benefit from developing greater self-compassion.

It is an interesting empirical question whether self-compassion is implicitly generated in psychotherapy, and is one of the factors underlying effective treatment. This certainly seems to be the case, and may have important implications for understanding the therapeutic process. Neff, Kirkpatrick and Rude[14] conducted a study that tracked changes in self-compassion experienced by therapy clients over a one-month interval. Therapists used a Gestalt two-chair technique[39] designed to help clients lessen self-criticism and have greater compassion for themselves. Results indicated that increased self-compassion levels over the month-long period (which were assessed





under the guise of an unrelated study) were linked to fewer experiences of self-criticism, depression, rumination, thought suppression and anxiety.

Paul Gilbert has developed a group-based therapy intervention called Compassionate Mind Training (see [chapter 3](#)). CMT is designed to help people develop skills of self-compassion, especially when their more habitual form of self-to-self relating involves self-attack. In a pilot study of CMT involving hospital day patients with intense shame and self-criticism, significant decreases in depression, self-attacking, shame and feelings of inferiority were reported after participation in the CMT program[40]. Moreover, almost all of the participants felt ready to be discharged from their hospital program at the end of the study.

Therapeutic approaches that rely on mindfulness, like Jon Kabat-Zinn’s Mindfulness-Based Stress Reduction (MBSR) program[41], may also be an effective way for people to develop self-compassion. Mindfulness teaches people to notice the difficult thoughts and emotions that arise in present-moment awareness, so that they can be experienced with kindness, acceptance and non-judgment. MBSR courses are commonly taught by therapists and other health professionals to help people deal with stress, depression and other forms of mental suffering. Research has demonstrated that MBSR significantly increases self-compassion[42],[43]. In fact, some researchers have proposed that self-compassion may be a key mechanism by which mindfulness-based interventions improve well-being[44],[45]. In support of this idea, Shapiro, Astin, Bishop and Cordova[41] found that healthcare professionals who took an MBSR program reported significantly increased self-compassion and reduced stress compared to a waitlist control group, and that self-compassion mediated the reductions in stress associated with the program. Similarly, Kuyken et al.[46] examined the effect of MBCT compared to maintenance anti-depressants on relapse in depression, and found that increases in mindfulness and self-compassion both mediated the link between MBCT and depressive symptoms at 15-month follow-up. They also found that increased self-compassion (but not mindfulness) reduced the link between cognitive reactivity and depressive relapse.

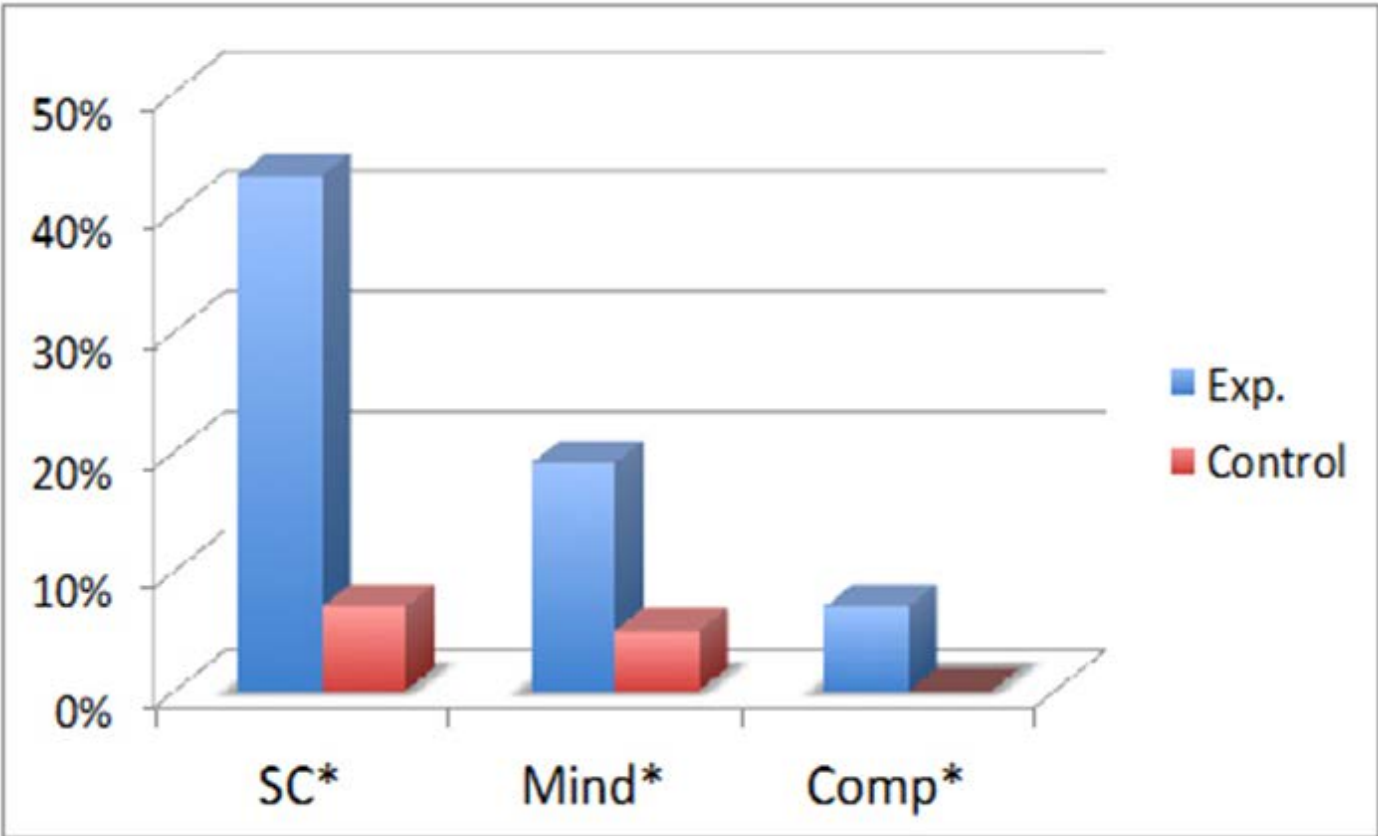


Figure 2. Percent increase in self-compassion, mindfulness, and compassion for others

Although mindfulness-based interventions can increase self-compassion, these programs devote relatively little time to explicitly teaching skills of self-compassion and focus primarily on teaching techniques to enhance mindfulness. For this reason, Christopher Germer and Kristin Neff have developed a short-term intervention program specifically designed to teach self-compassion skills called Mindful Self-Compassion (MSC), which is described in detail in [Box 1](#). There is already preliminary evidence that the program is effective[47]. A randomized controlled study of the MSC program compared outcomes for a treatment group ($N = 24$; 78% female; M age = 51.21) to those who were randomized to a waitlist control group ($N = 27$; 82% female; M age = 49.11). Compared to the control group, participation in MSC was significantly more likely to increase participants' degree of self-compassion. In fact, MSC increased self-compassion levels by 43%.

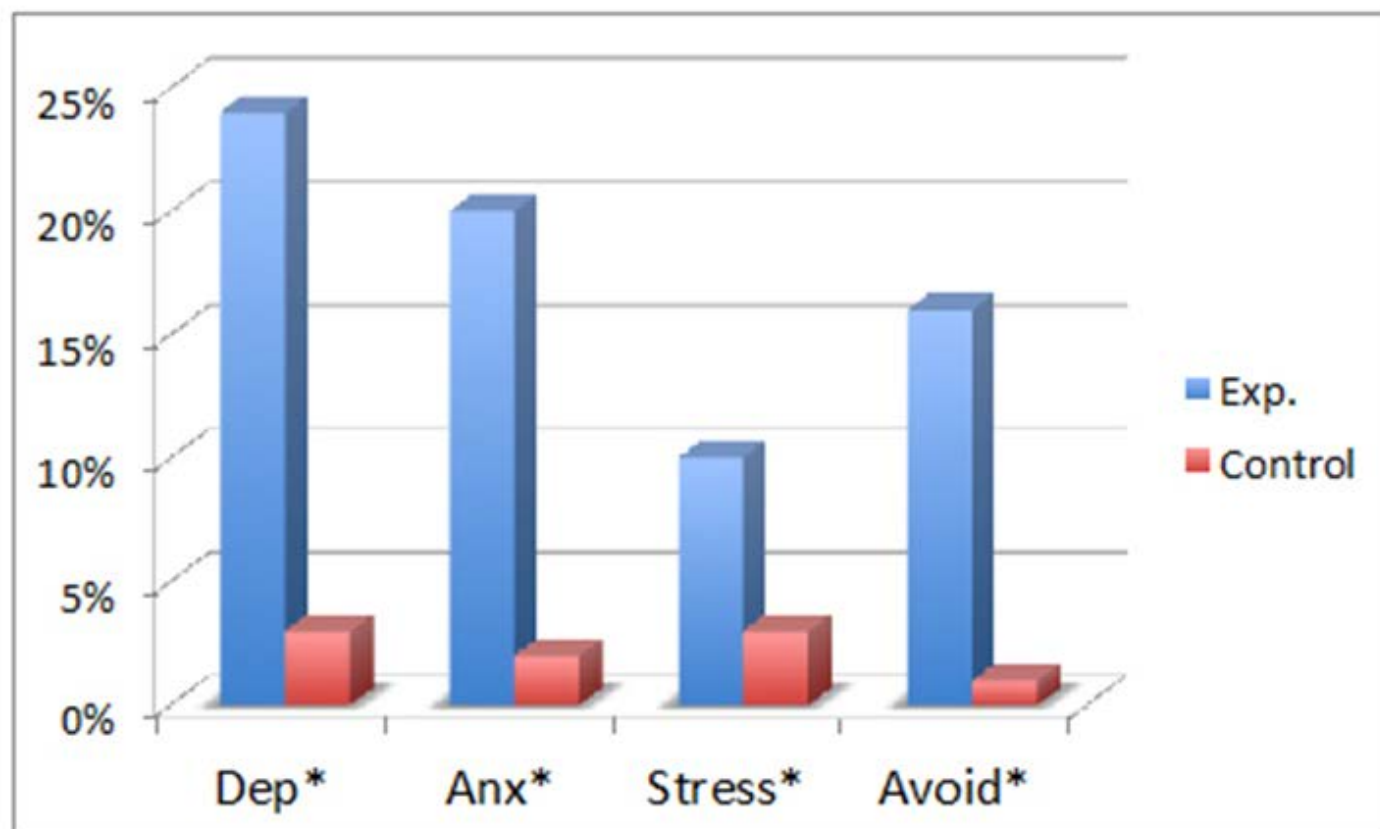


Figure 3. Percent decrease in depression, anxiety, stress and emotional avoidance

To provide comparative insight into the size of this increase, MSC increased self-compassion by 1.13 points on a 5-point scale. A review of the literature revealed that five MBSR studies yielded an average increase of .44 points (range of .11 to .61) on the SCS[42],[43],[48],[49],[50], while three MBCT studies yielded an average increase of .30 points (range of .22 to .38) on the SCS[46],[51],[52]. This suggests that the specific teaching of self-compassion skills in the MSC program is particularly effective for increasing self-compassion levels.

Participation in the MSC program also significantly increased mindfulness and compassion for others compared to the control group, but to a lesser extent. Program participation was associated with other beneficial outcomes, significantly decreasing depression, anxiety, stress and emotional avoidance, and significantly increasing life satisfaction.

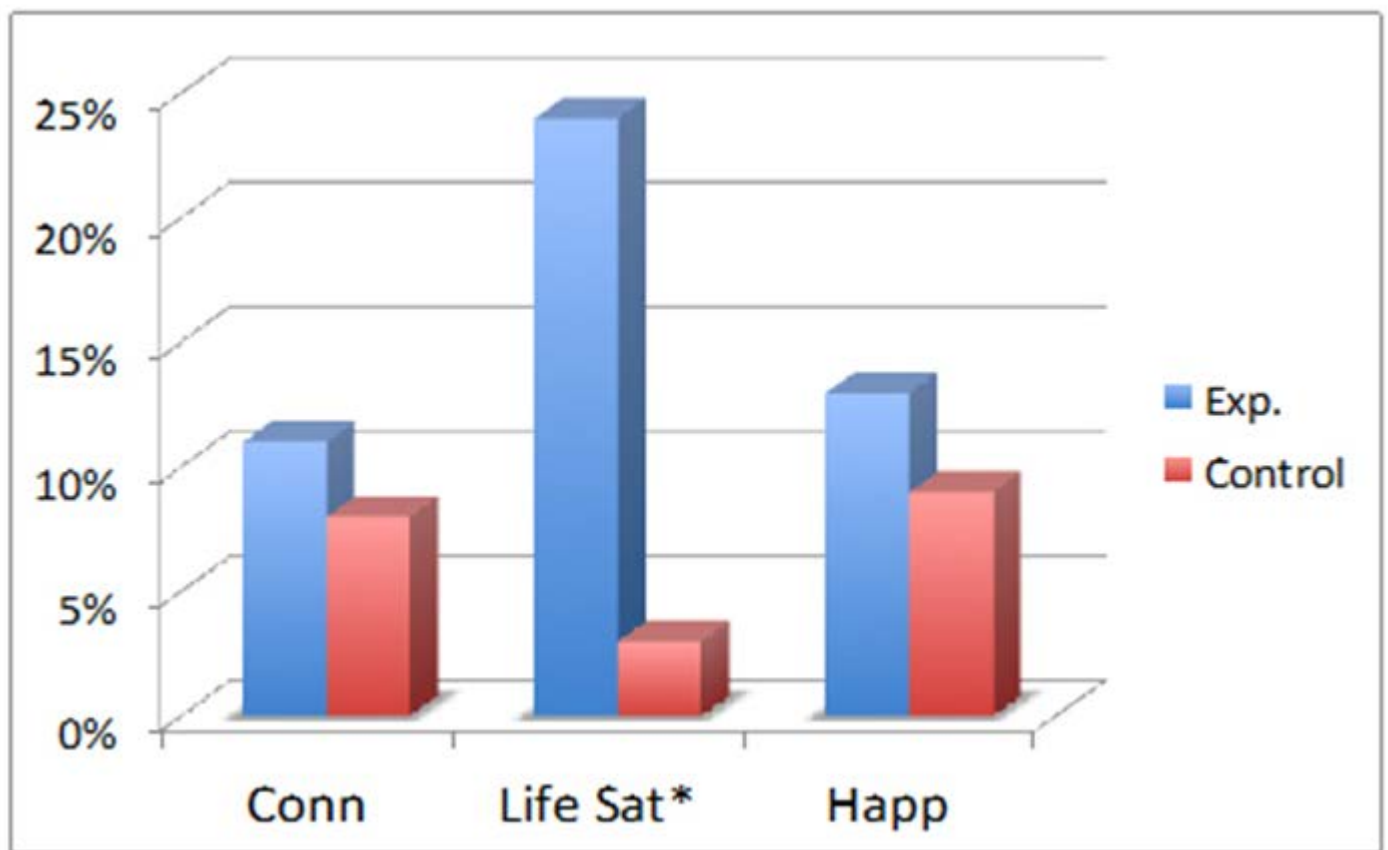


Figure 4. Percent increase in connectedness, life satisfaction, and happiness

Further analyses found that the reduction in anxiety and depression associated with the MSC program were explained by increases in self-compassion, but not mindfulness. Increased mindfulness and self-compassion both predicted decreased stress and increased life satisfaction, while increased mindfulness, but not self-compassion, predicted decreased emotional avoidance. These results underscore the fact that mindfulness and compassion are both important means of enhancing mental health, and that each construct has unique yet overlapping impacts on psychological functioning. The degree to which participants' self-compassion levels increased was significantly linked to their degree of self-compassion practice, both in terms of formal meditation and informal practice in daily life. Gains in all study outcomes were maintained at six-month and one-year follow-up. In fact, life satisfaction actually increased from just after the MSC program ended to the one-year follow-up, suggesting that the continued practice of self-compassion can continue to enhance one's quality of life over time.

Given that research on MSC is brand new, future research directions for the MSC program are numerous. For instance, it might be helpful to teach the MSC course to targeted populations such as adolescents, college students, clinicians, healthcare professionals, parents, spouses, etc., to help them to deal with the challenges of life with greater ease. By wrapping emotional pain in the warm embrace of self-compassion, suffering is ameliorated and well-being is enhanced, allowing for a healthier and more balanced way of being.

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Chapter 17

The Science of Subjective Experience

Positive Emotions and Social Closeness Influence Autonomic Functioning

Positive emotions increase mental health

Social closeness increases physical health

Vagal tone promotes positive emotions and social closeness

Bethany E.
Kok



The Science of Subjective Experience

What does the compassionate life feel like, and does that feeling matter? In a later section of this book, you will have the opportunity to read first-person accounts of felt compassion and to immerse yourself in imagining the diverse emotions, thoughts and perceptions that accompany the experience of compassion. You will also learn that regularly having the subjective experience of compassion is accompanied by changes in structural, endocrine, immune and epigenetic systems. But are these two things related? In other words, is “feeling” compassion simply an indicator that one’s meditative practice is going well? Or is there something special, something substantive about experiencing love for self and others, having positive intentions towards others, and directing one’s attention towards others that *results in* biological and behavioral change?

Many scientists have argued that a person’s subjective experiences are just as substantive and meaningful a venue for impactful change as their immune system or HPA axis[1], [2]. After all, life is ultimately experienced through the lens of the subjective – the shock of the first few drops of rain on bare skin, the euphoria of a first kiss, the lead weight of loneliness – and thus any changes that compassion enacts on the body must be filtered through the inner subjectivity. If compassion does not change a person’s subjective experience, how can it reach deeper to change their body and brain?

In discussing the interrelations between compassionate experiences and neurological and physiological change, I first describe the impact on the body and brain of two subjective experiences, positive emotions and perceived closeness to others, that characterize the compassionate experience. Then I describe a series of studies that track how loving-kindness meditation, a form of compassion training, induces changes in these subjective experiences that lead to changes in physiological functioning. Finally, I discuss how the relationship between subjective experience and physical state is ultimately bi-directional, making compassion a potentially self-sustaining state.

The Subjective Experience of Social Closeness and Loneliness

Feelings of social closeness are a critical component of compassion (see [chapter 15](#)). Recent research suggests that feeling socially connected may be as necessary to basic physical functioning as the need to eat, drink and sleep. A recent meta-analysis found that feelings of social closeness decreased overall mortality risk by 50% to 91%, an effect three times greater than engaging in physical exercise or maintaining a healthy weight and comparable to quitting smoking[3]. More specifically, the perception of oneself as enmeshed within a variety of social relationships is associated with lower susceptibility to cardiovascular disease[4], some types of cancer[5] and various infections[6],[7]. In an experimental study, researchers increased participants’ feelings of social closeness over eight weeks relative to an active control group, and found that participants in the social closeness condition increased in vagal tone, a measure of autonomic regulation linked to a wide variety of positive health outcomes[8].

Just as social closeness leads to positive health outcomes, social isolation is associated with a wide variety of negative health outcomes[9]. More importantly, the subjective experience of feeling isolated, called loneliness, strongly impacts physiological functioning. Feeling lonely is an independent predictor of negative mental and physical health outcomes in adults above and beyond actual frequency of social contacts[10]. Lonely adults are at a greater risk of cardiovascular

disease[11], high blood pressure[12], fatigue and inefficient sleep[13],[14], decreased physical activity over time[15] and decreased cognitive function over time[16]. Compassion may be beneficial in part because it causes people to feel less lonely and to perceive themselves as more connected to others and the world, leading to more efficient and healthy physiological functioning.

A sense of closeness to others is inherent to the experience of compassion. The research described above suggests that the closeness element of compassion may be a driving force in the wider physiological consequences of compassionate practice.

The Subjective Experience of Positive Emotions

Compassion is characterized by feelings of love and joy, as well as other positive emotions (see also [chapter 15](#) and [chapter 18](#)). Positive emotions are consequential for physical and neurological functioning. In one striking study, the number of different positive emotions referenced within handwritten autobiographies predicted mortality six decades later, with those in the highest quartile living 10 years longer than those in the lowest quartile[17]. Within healthy samples, frequent positive emotions are linked to reduced susceptibility to cardiovascular disease[18] and the common cold[19], and within patient samples to reduced mortality[20]. A meta-analysis of nearly 300 studies concluded that positive emotions carry benefits, including improvements in problem-solving skills, self-esteem, sociability and relationship satisfaction and altruistic behavior, as well as in immune system function and physical health[21].

While there are studies that focus on the benefits of individual positive emotions, such as love, gratitude, contentment or joy, the research described above suggests that it is the frequency of positive emotional experiences that leads to consequential health effects, rather than the specific positive emotion. This counter-intuitive conclusion may be explained by Fredrickson's *broaden-and-build theory*[22],[23], which holds that in contrast to negative emotions (e.g., anger, fear, disgust), which narrow people's awareness towards survival-promoting maneuvers (e.g., fight, flight, spit), positive emotions (e.g., joy, interest, serenity, love) *broaden* awareness in ways that, over time, *build* people's survival-promoting personal resources (e.g., way-finding skills, resilience, social bonds, physical fitness). Laboratory experiments that have assessed behavior[24], eye movements[25] and brain activity[26] confirm that positive emotions broaden awareness. This research implies that compassion may "open the eyes" just as it "opens the heart", resulting in a more creative, flexible and receptive approach to life that promotes growth and health.

Loving-Kindness Meditation, Subjective Experiences and Changes in Health

see [Loving-Kindness \(Metta\) Meditation](#)

The literature on social closeness and positive emotions suggests that when people experience "warm and loving" feelings as part of compassion, their feelings should go on to act upon their bodies and minds in consequential ways[6],[19],[27]. The best test of whether these subjective experiences are a potential mechanism of action for compassion, however, would be to experimentally induce compassion while tracking changes in subjective experience and physical functioning over time, in order to test whether a) compassion meditation induces social closeness and positive emotions and b) whether social closeness and positive emotions mediate the relationship between compassion training and changes in health.

In two studies of loving-kindness meditation, the researchers addressed both of these questions. Loving-kindness meditation, or *metta*, is an emotion-training practice drawn from the Buddhist tradition. In *metta*, meditators focus on phrases such as "May all beings be happy. May all beings

be safe. May all beings live with ease”, while simultaneously nurturing positive loving emotions towards the target of their meditation and visualizing sending the emotions towards the target. While *metta* does not focus exclusively on relieving suffering, it is still a kind of compassion meditation where the meditator’s intention is that others will feel joy and peace[28]. Through the process of intentionally generating warm and loving feelings for others, practitioners increase their “daily diet” of positive emotions and social closeness, with consequences for mental and physical health.

Loving-kindness meditation nurtures mental health by increasing the frequency or intensity of positive emotional experiences. In one longitudinal study, participants were assigned to meditation or to a monitoring waitlist control condition and provided daily reports of their positive emotions for nine weeks. Participants assigned to learn loving-kindness attended weekly hour-long group meditation workshops led by an experienced loving-kindness teacher. They also received a guided meditation CD and encouragement to practice independently throughout the week. Participants in the waitlist condition received no training, but were offered the chance of receiving meditation training after the study had ended[29].

Meditators increased in positive emotions over the course of the study, while participants in the control condition did not show any change. Significantly, in addition to the effect of condition, positive emotions also increased with time spent meditating. In other words, participants who reported spending more time in meditation over the course of the study showed greater increases in positive emotions, suggesting that the benefits of loving-kindness were due to the meditation itself and not contextual factors such as the teacher or spending time learning in a group.

Increases in daily positive emotions in turn predicted growth in a range of resources, including mindfulness, positive social relations, environmental mastery and self-reported physical health. These gains in resources were consequential for participants, in that they accounted for improved life satisfaction and reduced depressive symptoms[29].

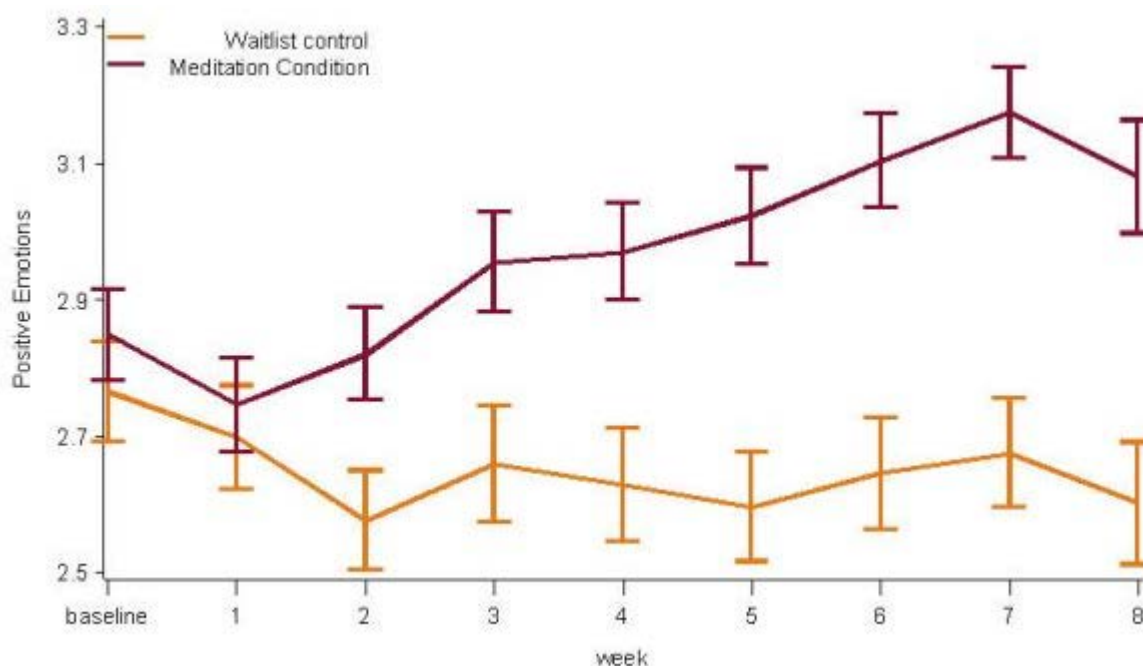


Figure 1. Loving-kindness meditation increases positive emotions over seven weeks of training. The effects persisted at a measurement taken one week after training.

Loving-kindness meditation may also improve physical health through increases in both social





closeness and positive emotions. In a second longitudinal study of loving-kindness meditation, participants were again assigned to either meditation training or a waitlist control and provided daily reports for nine weeks. This time, however, participants reported both positive emotions and feelings of social connectedness each day. In addition, the experimenters measured vagal tone, an index of autonomic regulation, at the beginning and end of the study. Vagal tone represents the bodily capacity to rapidly and flexibly adapt to changing circumstances, and is associated with immune functioning and cardiovascular health[30]. The study replicated the effect of loving-kindness on positive emotions (see Figure 1). Participants in the meditation condition also increased in social closeness and vagal tone[31].

Further modeling revealed that positive emotions and social closeness were linked, with changes in positive emotions driving changes in social closeness throughout the study. In addition, the changes in positive emotions and social closeness impacted autonomic regulation. In the final model, meditation increased positive emotions, which led to increases in social closeness, which ultimately led to increased vagal tone[31], suggesting that loving-kindness may improve physical health in part by promoting positive subjective experiences that influence vagal tone.

Bi-Directional Linkages and Upward Spirals of Compassion

Inducing compassion through loving-kindness meditation appears to increase the frequency or intensity of experiences of social closeness and positive emotions, and these subjective experiences have consequences for mental and physical health. Interestingly, improvements in health may increase the likelihood of experiencing compassion in the future. In the second longitudinal study described above, loving-kindness led to increased positive emotions, which led to increased social closeness, which led to increased vagal tone. In addition, however, vagal tone at the start of the study predicted participants' positive emotion and social closeness gains over the eight weeks[31]. This exciting finding suggests that as people experience compassion, their bodies change in ways that increase the likelihood that they will experience more compassion in the future (see Figure 2). In this upward spiral, compassion predicts greater experiences of social closeness and positive emotions, which lead to better health, which increases the subjective impact of compassionate practice. Through this bi-directional process of growth and change, compassion may become a self-sustaining, effortless practice where each moment of compassion makes the next moment even more likely.

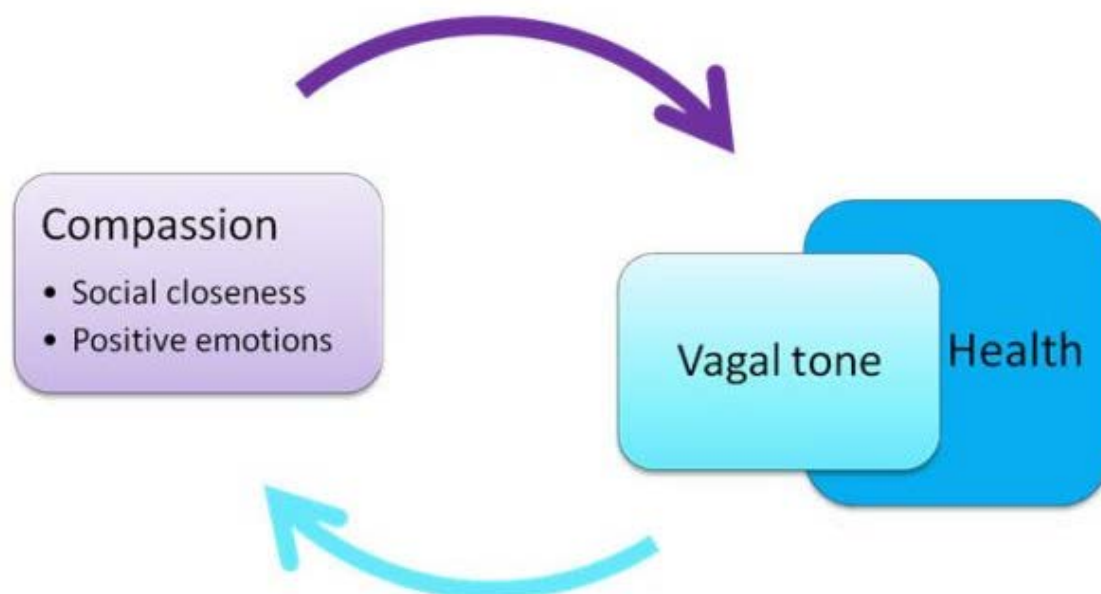


Figure 2. A theoretical model of self-sustaining compassion.

Conclusions

A compassionate life is full of positive emotions and feelings of social closeness. These subjective experiences, in addition to feeling pleasant, play an important role in the more far-reaching effects of compassion on mental and physical health. To the extent that compassion leads to more moments of positive emotion, mental health may improve. To the extent that compassion increases feelings of closeness to others in the world, the body's ability to regulate its balance of sympathetic and parasympathetic nervous system activity may improve. In turn, these improvements in mental and physical functioning may result in greater openness towards future experiences of compassion.

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Chapter 18

The Art of Emotional Balance

On getting it "Just Right"

Compassion is not an emotion but a motivational drive

This drive is dampened by too much or too little emotion

Regulating self-focused emotions are critical for compassion

Jocelyn
Sze



Margaret
Kemeny



The Art of Emotional Balance

When you think of models of compassion throughout time, what emotional state do you picture them in? Do you picture Mahatma Gandhi, Mother Theresa or Jesus Christ in a fiery rage, deep shame or uncontrollable sorrow over all the suffering in the world? Do you picture them with excessive warm and fuzzy feelings towards oppressors or persecutors to whom they still offer compassion? Or do you picture them with some measure of equanimity and emotional balance, even while taking action in the face of great suffering? As its Latin root *movere* (to move) suggests, emotion can serve as a powerful motivator, propelling individuals towards certain action tendencies[1],[2]. Fear motivates organisms to run from threats, anger to attack and defend oneself, pleasure to approach. In fact, much of the literature on emotion and motivation is based on the assumption that emotions are motivating, and a corollary to this, that more intense emotions are more strongly motivating[3]. Intriguingly, the link between emotion and compassion appears to operate differently. That is, research is increasingly pointing towards a Goldilocks relationship: compassion flourishes in emotional conditions characterized by not too much and not too little, not too hot and not too cold, but a temperature *just right*, à la emotional balance. In this chapter, we discuss the theoretical and empirical basis for understanding compassion as a motivation rather than an emotion, and subsequently discuss the ways in which specific emotions can impede or facilitate this motivational drive. From this, we discuss ways in which training in mindfulness and emotion regulation can increase the drive to be compassionate.

Compassion as a Motive

In the absence of an agreed-upon definition of compassion, researchers often use other-oriented emotion terms such as sympathy, empathy, empathic concern or pity as a substitute (for a review, see Goetz, Keltner & Simon-Thomas, 2010[4]; [see also [chapter 15](#)] for a differentiating view on empathy and compassion). Lexical studies across a number of different languages (e.g., English[5], Italian[6] and Chinese[6]) also indicate that compassion is typically grouped together with these emotion terms. We argue, however, that compassion is better conceptualized not as an emotion itself but as a motivational drive that is enhanced or inhibited by certain emotional states. Indeed, English dictionaries tend to focus on this core motivational aspect, defining compassion as a “deep awareness of the suffering of another coupled with the wish to relieve it” (American Heritage Dictionary) or as the “human quality of understanding the suffering of others and wanting to do something about it” (Merriam-Webster). Similarly, the Dalai Lama has defined compassion as “a sensitivity to the suffering of self and others, with a deep commitment to try to relieve it”[7], [8]. In all these definitions, what makes the construct unique is not a signature affective state but rather an awareness of suffering and a motivation to relieve it.

Conceptualizing compassion as a motivation rather than an emotion has several important implications. Its first implication is at the basic phenomenological level of what compassion is and is not. As opposed to conceptualizing compassion in terms of the basic tenets of emotion (e.g., a rapid and efficient signal with a distinct subjective, behavioral and physiological profile[9]), compassion instead becomes a phenomenon defined by the characteristics of motivation: (a) *activation*, or the desire to initiate a behavior; (b) *persistence*, or continued effort towards a goal even in the face of obstacles; and (c) *intensity*, or the degree of energy and concentration required to pursue a goal[3]. Affective, cognitive, biological and social factors contribute to motivational drives, but they do not appear to define the makeup of compassion in terms of any singular package or profile.

In other words, rather than being defined by a feeling like warmth, sympathy or sadness for another, compassion can be viewed as a motivational drive that does not appear to rely on, require or communicate any unique and singular affective state. Indeed, while prototypical behavioral expressions of compassion have been proposed (e.g., oblique eyebrows, fixed gaze and forward lean[10]), as one study recently found, very few people (a range of 0% to 8% across two studies) are able to freely identify “compassion” facial expressions as such, more frequently interpreting the expression simply as sadness[11]. The lack of a signature and uniform compassionate facial expression is consistent with the premise that compassion is a drive that can arise flexibly under different emotional conditions, or perhaps even in the absence of emotion.

Moreover, whereas emotions tend to focus on the evaluative and signaling aspects of the relationship between organism and object, motivational drives more directly emphasize the organism’s desire to act with respect to the object or environment[12]. Thus, when compassion is conceptualized as a motivation rather than an emotion, the “other” or target of compassion may exist unqualified. That is, compassion can be conceptualized as a widely encompassing, non-evaluative aspiration that can be delivered even in the absence of emotional attachment to or evaluation of the target. As alluded to above, this allows for the possibility that Gandhi may have experienced genuine compassion towards his oppressors in the absence of feeling much warmth or sympathy towards them.

Another key implication of viewing compassion as separate from emotion rests in how we understand their relationship to one another (see [Figure 1](#) for our model of this relationship). From a theoretical standpoint, emotion and motivation are closely linked in that emotions are often precursors to motivational drives, signaling us to pay attention and act in particular ways towards objects in our environment[13]. In line with this, compassion can be viewed as a dynamic motivational drive that may be inhibited or facilitated by different emotional processes. In particular, we argue that emotions that activate the fight or flight system and direct attention towards the self, as in the case of anger, fear, shame and embarrassment, serve as inhibitors to the compassion drive. Moreover, unlike other motivational drives such as aggression or pleasure seeking, a growing body of research suggests that compassion operates best under conditions of emotional balance, or low arousal emotional states. In other words, subjective emotional intensity, particularly in the case of negatively valenced emotions but with any excess emotion in general, appears to thwart compassion. At the same time, a numbness or insensitivity to emotion can also hinder compassion. From this view, training in emotional balance (i.e., learning how to strike the balance between feeling too little or too much, and learning in particular how to manage potentially destructive emotions) is seen as a key aspect of cultivating compassion. Importantly, the goal of managing destructive emotions is not simply to avoid or eradicate them, but to acknowledge and be mindful of them without becoming overwhelmed or dictated by them.

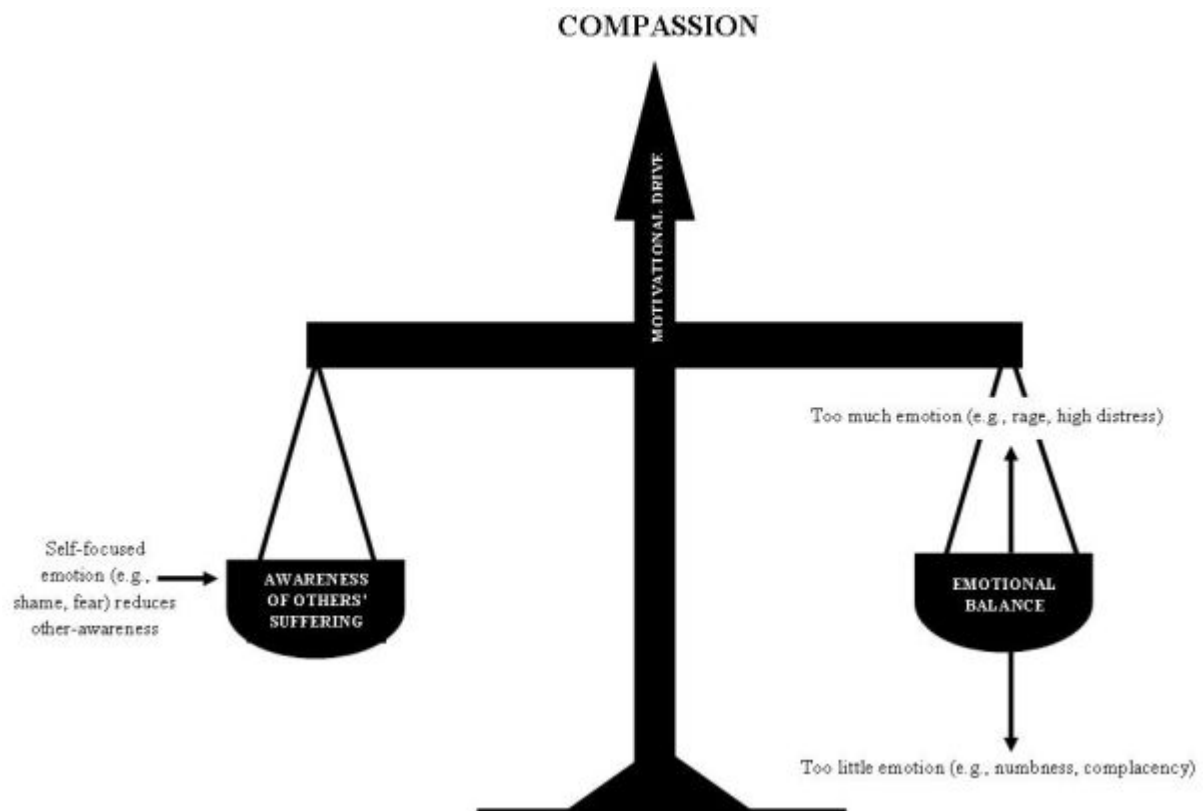


Figure 1. Model depicting the importance of awareness of others' suffering and emotional balance in increasing the compassion drive, and the unbalancing effects of self-focused emotion as well as too much or too little emotion.

Inhibitory Effects of Self-Oriented Emotions

As suggested above, one significant impediment to compassion is emotion that shifts attention in a direction inconsistent with the goals associated with compassion. The focus of compassion is “the other”, and in particular the well-being or plight of the other. Emotions that involve a persistent focus on “the self”, whether positive or negative in valence, should impede a focus on the other, thus reducing the capacity for compassion.

The fight or flight motive, for example, is focused primarily on preserving the well-being and survival of the self (or one’s “expanded” self, e.g., one’s progeny). Therefore, emotions associated with the fight or flight response, namely fear and anger, should interfere with the experience of compassion. Dacher Keltner, in his book *Born to Be Good: The Science of a Meaningful Life*[14] [<http://greatergood.berkeley.edu/>] makes a compelling case for this position. He argues that similar to the fight or flight response, other-oriented responses like compassion are wired-in components of our brain and behavior and our instinctual repertoire. And the fight or flight responses are at odds with the motive to care for others on an ongoing basis [see also [chapter 7](#)].

A second emotion set that should interfere with the experience of compassion includes the self-conscious emotions: shame, embarrassment and pride. These emotions involve a focus on the self, either negative in the case of shame and embarrassment or positive in the case of pride[15]. In the case of shame, the focus is on negative evaluations of core aspects of the self (e.g., feeling ashamed about being unintelligent). For example, shame can occur when one experiences a threat to the goal of maintaining one’s esteem, status and acceptance in the eyes of others and involves evaluations of the self as damaged or inferior[16],[17],[18]. In contrast, while embarrassment also involves a negative evaluative focus on the self, that focus is directed towards more state-like behavior (e.g., feeling embarrassed for tripping in front of others). Shame and embarrassment should interfere with the motivation to reduce the suffering of others, at least in part because both





emotions direct attention towards maintenance of the “social self”, thereby reducing available energy and interest in the plight of others. While both compassion and shame/embarrassment involve an awareness of the other, they differ fundamentally in that shame and embarrassment are focused on how others view the self, whereas compassion is a prosocial response that is focused on the plight of the other. We also argue that a “positive” evaluative focus on the self, as in pride, would reduce the experience of compassion because, again, the focus of this social emotion is on the maintenance of the self in the eyes of others rather than on the plight of the other.

The fact that threat-based emotion systems and the compassion drive have distinctive psychobiological correlates supports their potentially antithetical nature. For example, the fight or flight response is characterized by an activation of the cardiovascular and respiratory systems in order to prepare the organism to address a threat[19],[20]. This response is associated with an activation of the sympathetic nervous system (SNS), resulting in the release of hormones such as norepinephrine, which directly act on the heart to increase heart rate, blood pressure and other cardiovascular functions[19]. There is a smaller but rapidly expanding body of literature demonstrating that the biology of “other-oriented” prosocial responses is quite distinct from the biology of the fight or flight response. In particular, the prosocial response appears to be more consistently associated with activation of the parasympathetic nervous system (PNS), which is mediated by the vagus nerve and acts in opposition to the SNS. Notably, activation of the SNS involves a deceleration of heart rate and occurs in conjunction with orienting and outward attention[21],[22],[23].

In line with this, Stephen Porges and colleagues argue that when the “social engagement” system is engaged, there is an activation of the PNS that is in turn associated with a calming response and a reduction in activation of the stress systems, including the SNS[24]. For example, familiar faces and “safe” contexts can reduce fight or flight activity and increase this restorative system as manifested by increased respiratory sinus arrhythmia (RSA), an index of the PNS (higher RSA reflects greater parasympathetic activity)[24]. Keltner and others argue that these changes prepare the body to approach and soothe. This system supports enhanced social behavior and social cohesion at a larger level, while the physiology associated with fight or flight would interfere with this more approach-oriented psychobiological response.

It is well known that the vagus nerve plays a significant role, or acts as a brake, on heart rate, in contrast to threat-based emotions, which are generally associated with increases in heart rate[24] [see also [chapter 17](#)]. The extensive psychobiological literature supports the important premise that prosocial responses can reduce one’s fight or flight responding. In other words, directing prosocial responses such as compassion towards others may reduce *one’s own* fight or flight activity. For example, Nancy Eisenberg and colleagues have shown that children and adults exposed to sympathy-inducing films showed reductions in heart rate when compared to responses to more fear-inducing films[25]. Moreover, a growing body of research suggests that engaging in prosocial behaviors reduces stress and improves well-being[26],[27],[28],[29]. A very interesting question is whether prosocial behavior may be a more powerful method for damping down extended or overactive SNS responding than traditional mechanisms of relaxation, for example.

Facilitative Effects of Emotional Balance

We argued above that specific emotions that orient attention towards the self, and particularly threat-related and blame-focused emotions such as anger and shame, can be directly detrimental to the cultivation of compassion. We also propose that emotional intensity more generally, regardless of emotion type and valence, can serve to impede compassion. Several lines of research suggest an association between compassion and cognitive control, or the ability to take

the perspective of another and inhibit certain impulses in the service of the other. Nancy Eisenberg and Daniel Batson have pioneered research suggesting that high emotional contagion or personal distress in witnessing the distress of others can overwhelm the system and inhibit other-oriented motivation [see also [chapter 15](#) for the biology underlying empathic distress versus compassion]. Increasing evidence from the field of social neuroscience appears to support such links in terms of overlapping neural circuits that are implicated in emotion regulation, cognitive control and the capacity to cultivate compassion and other forms of prosocial responding[30]. More specifically, studies from both social psychology and social neuroscience suggest that excessive or dysregulated emotional responding can prevent a person from pulling back from this emotion to separate self from other, assess the situation at hand accurately and allocate attentional resources towards the other[31],[32]. This becomes particularly relevant when conceptualizing the compassion drive as involving an accurate awareness of another's suffering and an intentional focus towards relieving such suffering.

At the same time, too little emotion may also impede the compassion drive. Research has shown a consistent link between affective empathy (being sensitive to and emotionally sharing or resonating with the emotions of others) and the two core components of compassion: awareness of the emotions of others and an other-oriented desire to reduce another's suffering[33],[34],[35]. This link is also supported by biological evidence demonstrating an association between empathy-related brain responses in the anterior insula and prosocial behavior[36]. Affective empathy, or moderate levels of "emotional sharing" in which self is still distinguished from other, is generally considered facilitative in understanding another's emotions and motivating an other-oriented compassionate drive. Associations between blunted affect and decreases in empathy and prosocial behavior have been observed across a number of psychopathologies, including depression[37], schizophrenia[38] and psychopathy[39]. Another example of "too little" emotion is the phenomenon known as "compassion fatigue", a term used to describe the emotional burnout that can potentially result from caring for others in emotional pain. This term, also sometimes described as vicarious traumatization, refers to a reaction characterized by emotional numbness and detachment from others[41]. As argued elsewhere (see [chapter 15](#)), "compassion fatigue" might rather be renamed "empathic distress fatigue". In other words, this numbness or lack of emotional reactivity, typically following a spike of emotional reactivity, appears to create an emotional environment in which the drive to reach out and reduce another's suffering is dampened. Consistent with the Buddhist concept of the Middle Way or path of moderation, multiple lines of research converge to suggest the role of emotional balance in facilitating the compassion drive.

The Role of Emotion Regulation and Concluding Thoughts

In sum, what does this work tell us about processes that may be central to promoting compassion? First, research increasingly supports the notion that fight or flight emotions (e.g., anger and fear) and self-conscious emotions (e.g., shame, embarrassment and pride) can reduce the drive to be compassionate. Further, there is evidence to suggest that both too much and too little emotion can dampen this drive. This suggests that reducing self-focused emotions and promoting emotional balance may be critical for cultivating compassion. In other words, emotion regulation appears to be a key component in the cultivation of compassion. A number of specific strategies may be central to realizing this goal. First, when an individual has greater access to their emotional experience there is a greater likelihood that they will recognize that certain reactions are detrimental to themselves or others. This awareness will thereby motivate changes in behavior and environmental antecedents to these reactions. Thus, a first step would involve techniques and processes that promote greater self-awareness. Mindfulness processes could be central to fulfilling these goals as they are focused on increasing attention to and awareness of mental experience.





A second step in promoting compassion could involve directly increasing the motive to reduce the suffering of others. A number of Buddhist meditation techniques, such as loving-kindness meditation and compassion meditation, are taught with the intent of increasing desire to reduce the suffering of others and promoting positive, prosocial states of mind. A third step would involve changing actual behavior, decreasing “destructive” emotional behavior and increasing prosocial behavior, particularly in difficult and trying contexts.

There is initial evidence demonstrating that meditation techniques can support these three goals: that is, greater self-awareness[42],[43], increased motivation to reduce suffering[21] and changes in social behavior consistent with a more prosocial stance[21],[44]. Moreover, there is evidence suggesting that greater emotional balance may be a key mechanism explaining the effects of meditation on the cultivation of compassion. Along these lines, meditation has been associated with shifts in how much people value emotional balance. In one study, participants in an 8-week meditation intervention reported shifts towards valuing low arousal emotional states such as calm and contentment, and shifts away from valuing high arousal positive states such as pride relative to the control condition[45]. Results from the Cultivating Emotional Balance Project[21] showed that an intervention combining such techniques with others drawn from the science of emotion reduced emotional and physiological reactivity to stress tasks, increased recognition of facial expressions of emotion and enhanced prosocial responding (see Figures 2 and 3).

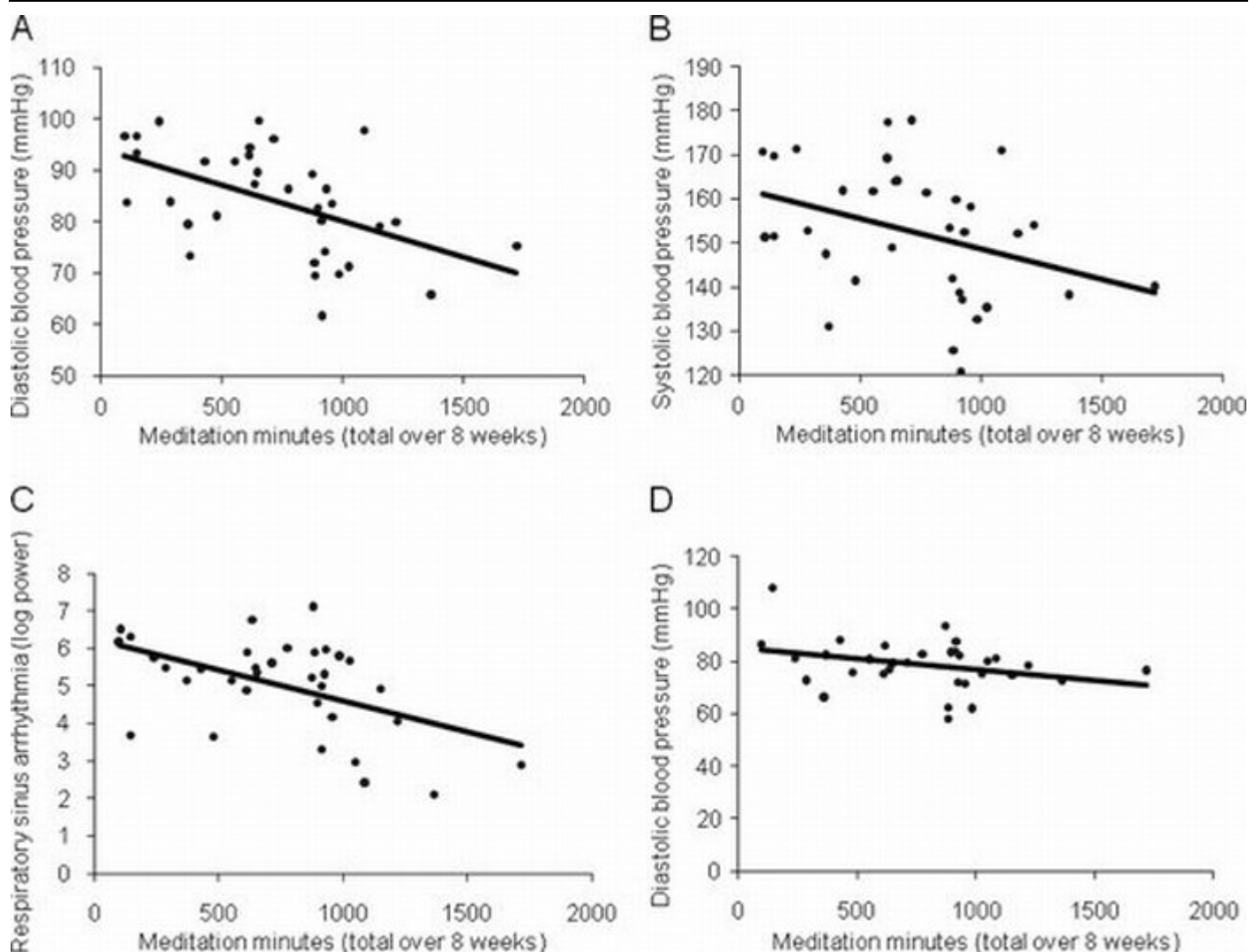


Figure 2.

Scatter plots of (A) meditation minutes and diastolic blood pressure (DBP; mmHg) during speech task at post-test, $r(31) = -.51, p < .01$; (B) meditation minutes and systolic blood pressure (SBP; mmHg) during speech task at post-test, $r(31) = -.43, p < .05$; (C) meditation minutes and respiratory sinus arrhythmia (RSA; log power) during math task at 5-month follow-up, $r(34) = -.58, p < .01$; and (D) meditation minutes and diastolic blood pressure (DBP; mmHg) during math task

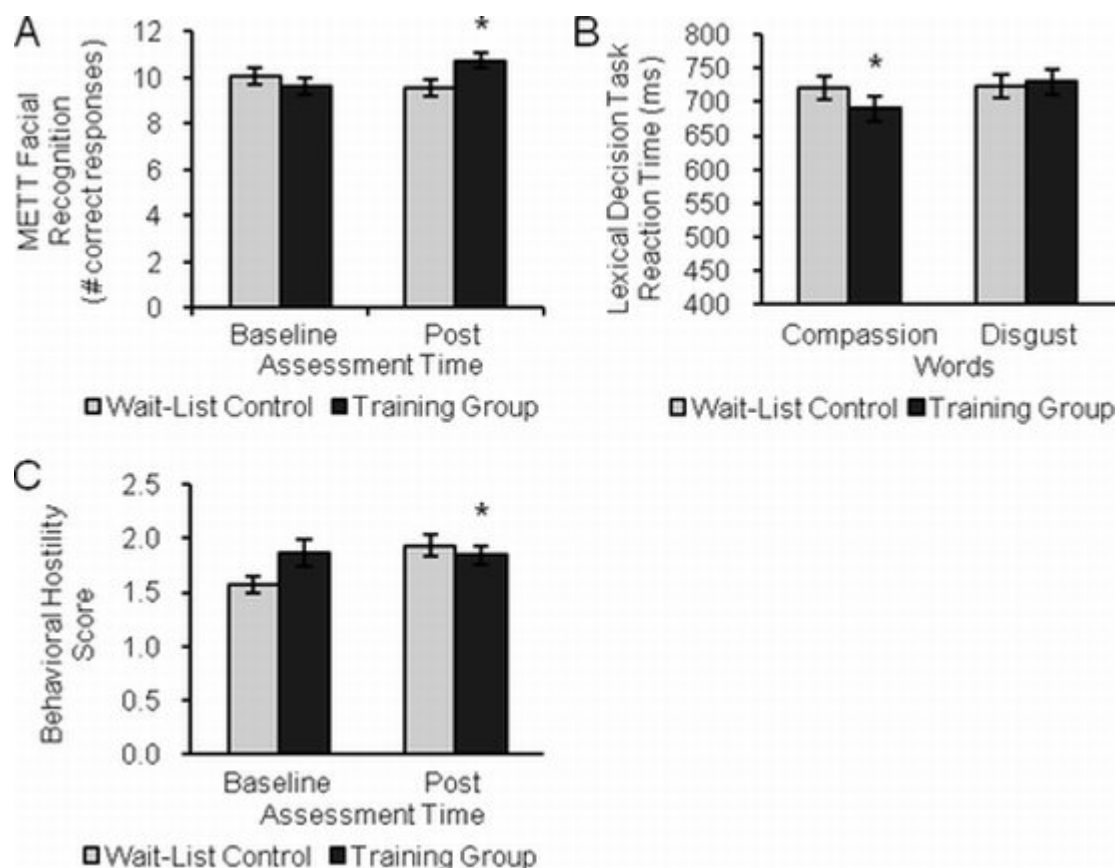


Figure 3. Comparison (mean +/- SE) of the training and wait-list control groups on assessments of (A) Micro-Expression Training Tool at baseline and post (METT; Ekman, 2004), Mixed Linear Models (MLM), $p = .009$; (B) Lexical Decision Task at the follow-up assessment point (MLM, $p < .05$; reaction time was computed for correct responses in each word type [compassion, disgust, neutral, non-word] appearing after each prime type [images eliciting compassion, compassion and disgust, neutral]); and (C) behavioral hostility demonstrated during the marital interaction task at baseline and post assessments using SPAFF coding (MLM, $p < .05$). Note that this baseline difference is not significant. From Kemeny ME, Foltz C, Cavanagh JF, et al. (2012). Contemplative/emotion training reduces negative emotional behavior and promotes prosocial responses. *Emotion*, 12(2), 338–350.

Importantly, the intervention appeared to influence not only self-reported behaviors but actual behaviors in a direction consistent with greater awareness of suffering and motivation to reduce suffering, for example, as observed during a marital conflict task and in subliminal responses to images of suffering. There is an emerging literature suggesting that such meditation-based interventions can have beneficial effects on processes related to prosocial responses[46],[47], indicating that mindfulness and other meditation techniques may support the cognitive and affective processes that promote the compassion drive. Overall, there is growing evidence that emotional balance may be a key mechanism by which mindfulness may promote compassion and related prosocial responses.

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Chapter 19

The Shamatha Project Adventure

A Personal Account of an Ambitious Meditation Study and its First Results

How experiences in the foothills of the Himalayas were transferred to a science lab

Executive function skills improve after meditation training and predict improved psychological functioning

Shamatha training leads to changes in well-being that are related to telomerase levels

Clifford
Saron



The Shamatha Project Adventure

In the summer of 1974, while I was still an undergraduate, I had the opportunity to attend a remarkable summer school. It was the inaugural summer of a new Buddhist university in Boulder, Colorado: the Naropa Institute. One evening, I found myself in a meditation class taught by Joseph Goldstein – at a time when hardly anyone knew that name. It was at dusk, and the room in which Joseph was teaching began to grow dimmer and dimmer, and it became progressively harder and harder to see. I remember this particular detail because of what Joseph said to us next. He said, “If you notice your experience closely, you’ll see that there arises in the mind an intention to turn on the light”. Noticing your experience carefully, arising in the mind: an intention. In that *single* sentence my understanding of the mind from neuroscience, introspection and Buddhism now came together – and I was hooked.

Intentions arise in the mind. This experiential observation informs us that “we” are in no particular location. We are embedded in this body, in this environment, responding to cues from within and without. I pursued this investigation of subjective experience through a number of meditation retreats that ran from morning until nightfall, with silent times of sitting and walking. In one of those retreats, I had an asthma attack and was determined to use meditation to clear my breathing. The more I tried, the worse it got. Eventually, when I could barely breathe at all, I felt the upward turned palm of my hand grow large and my *self* grow small and I was able to lovingly care for my sick body by my own hand. So I got up – and I took a spray of albuterol. In that simple act of self-care, I not only gave myself the gift of breath, but I taught myself an important lesson: I recognized the degree to which I was able to ignore *common sense*, on the one hand, and how capable I was of my own care, on the other. This process of introspection and examination of experience is intimately tied with learning how to become our own parent, an essential task of adulthood. And it led me to wonder: what is going on when we meditate?

One question we could ask scientifically is: *what do people do when they meditate?* However, it’s very difficult to answer this question. Mental practice doesn’t give you a particular signal. But you can ask a more important question: *what do people do differently because they have meditated?* This is a scientifically tractable question.

One of the central characters in my journey towards investigating this question is my friend and colleague, Richie Davidson, a well-known psychologist, neuroscientist and meditation researcher.

In 1990, Richie was due to give a talk to His Holiness the Dalai Lama regarding our research on brain activity and emotions at a meeting of the Mind and Life Institute in Dharamsala, India^[1], but was unable to go. I remember him looking at me with a glint in his eye and asking, “Do you want to go to Dharamsala?” Three weeks later, I found myself giving a presentation to His Holiness.

While in Dharamsala, I roomed with Francisco Varela, arguably the intellectual father of the dialog between Buddhism and cognitive science^{[2],[3]}.



Picture 1. Clifford Saron (left) and Richard Davidson in Maine in 1977. Photo by Susan Davidson.



Picture 2. Clifford Saron presenting data from his work with Richard Davidson on brain correlates of emotion and immunity to H. H. the Dalai Lama, Nov. 1990, at Mind and Life (ML) III: *Emotions & Health*.¹ Photo by Adam Engle.



Picture 3. Francisco Varela (1946-2001) in discussion at Kashmir Cottage, McLeod Ganj, India during MLIII. November, 1990. Photo by author.

Picture 4. Alan Wallace in a monk's stone hut on Bhagsu Mountain, above Dharamkot, India, September 1992. Photo by author.

And he said to me, “You know, we’re two old EEGers. We should do something – a research project here in Dharamsala”. So we connected with Alan Wallace, a Buddhist scholar, contemplative teacher and a translator for this meeting – who also was interested in scientific assessment of Tibetan mental training. These individuals are core figures in my personal journey towards years of research on the topic of meditation.

In 1992, we embarked upon a research expedition. Funded by the Fetzer Institute, we made our way to the foothills of the Himalayas in India, above the town of Dharmasala, to the tiny hill station of McLeod Ganj where the Dalai Lama lives. We brought almost 700 kg of testing equipment with us ([Picture 5](#)), in the hopes of building a field lab and perhaps learning more of the effects of Tibetan mental training from monks who were in retreat.

We met many extraordinary monks. One of them, Gen Lam Rimpa ([Picture 6](#)) was a teacher of Alan Wallace and led a year-long Shamatha retreat with Alan in 1987. Genla, as we called him, instructed us not to ask monks in retreat to come to any laboratory we built, but rather he cautioned us to be minimally invasive and go to them. So we packed the equipment we could carry in backpacks and traversed goat trails (visible in [Picture 7](#)) to visit the monks in situ. They lived in simple stone huts (see [Picture 8](#)) that many had built themselves as part of their meditative training.

Each monk we visited was welcoming, kind and appeared to take a genuine interest in meeting us. Since Alan had been a monk in these hills for 14 years and spoke Tibetan perfectly, we were given a necessary credibility with these yogis. Despite this, most wouldn’t tell us about their meditation experience. They said, “If you want to know about meditation: meditate”. Thubten Drakpa (see [picture 10](#)) was one of the few individuals who talked to us about his meditation practice.



Picture 5. Equipment cases spread about a bedroom in Kashmir Cottage, September, 1992. Photo by author.

Picture 6. Gen Lamrimpa, an eminent yogi and meditation master and one of Alan Wallace's teachers, in his hut above Tibetan Children's Village, September, 1992. He led a one-year Shamatha retreat with Alan in 1987. Teachings from that retreat are published⁴. Photo by author.

Picture 7. Meditation huts visible along goat trails on Bhagsu Mountain above Dharamkot. Photo by author.

Asking him about his practice was like interviewing a fine cabinetmaker, lovingly showing you the tools of his trade. He would say things like: When my mind is in despair, I use this technique. When I am lethargic, I use this technique. When I am over-excited, I use this technique to calm my mind. It was clear that he held deep insight into the nature of his own mind and that he had fostered methods by which to most effectively relate to the changing "weather patterns" of his mental events.

Meeting these monks and speaking with those who were willing to share their experiences with us was quite an extraordinary experience. Yet we soon realized that our efforts in attempting to study these monks high above Dharamsala were fraught with many cross-cultural issues^[5].

Technologically things were a big challenge as well. When our colleague Dr. José Cabezón made a second trip to test some of these same monks the next year using computer-based tasks, the laptop keyboard was too foreign for them to use at all and so they had to ask him to tap the keys, which made for highly variable reaction time data. Although invalidating the quantitative data, such a problem was minor compared to other differences more rooted in varying worldviews. For example, when we put an electrode cap on Francisco Varela's head to measure EEG waves ([Picture 9](#)), all the monks burst out laughing as though we'd told them the most hilarious joke. They were amused that we were using a device placed on the scalp to measure the mind when, to them, it was obvious that the mind is not in the head, but located at one's heart.



Picture 8. A closer view of a stone residence of yogis in retreat on Bhagsu Mountain and local traffic. May, 1993. Photo by José Cabezón.

Picture 9. Monks at the Institute of Buddhist Dialectics (<http://www.ibdindia.org/>) in McLeod Ganj, India observing a demonstration of EEG recording. Francisco Varela is wearing the electrode cap. Richie Davidson is visible in the far right-hand corner. The monks are laughing because the head appears to them an odd place to measure the mind, which is traditionally located at the heart. October 1992. Photo by author.

Picture 10. Thubten Drakpa, in his meditation hut where he had been in retreat for most of the previous two years

under the guidance of Gen Lamrimpa. September 1992. Photo by author.

Picture 11. Geshe Topgey as we were departing after his discourse on compassion. September 1992. Photo by author.

Another monk, Geshe Thopgey ([Picture 11](#)), gave us a life-changing talk on the nature of compassion. When we asked him how sadness and compassion could differ, he explained that while sadness could *catalyze* the arising of compassion, they are separate mind streams. In fact, he went on to say that one actually must learn to *love the conditions of suffering* as deeply as a mother loves her child, eliminating the desire to push those conditions away through aversion, in order to adequately gain insight into their causes and conditions and understand how to most creatively be of benefit.

There was no question that these monks were extraordinary. Yet it could be argued that these monks may have always been extraordinary. Perhaps the wisdom they shared with us was simply part of who they were and was not due to their meditation practice or monastic training. We decided that in order to investigate the relationship between meditation practice and mental training effects, we needed to undertake a longitudinal study, free of cross-cultural problems, in the West.

In 2007, in close collaboration with Alan Wallace and a team of researchers at UC Davis and elsewhere, we launched such a longitudinal study, The Shamatha Project. In so doing, we began to honor Varela's 1990 vision. The basic idea was for Alan Wallace to teach westerners focused attention meditation in a 3-month full-time retreat setting while we scientists measured a variety of changes in psychology and physiology that might reflect learning due to practice.

Our project was designed to investigate four main questions:

- (1) Can attention be trained through focused attention meditation?
- (2) Can training in loving-kindness, compassion and other beneficial aspirations support attention and improve emotion regulation?
- (3) Are improvements in attention related to psychological function?
- (4) What are the subjective, behavioral, neural and physiological correlates of such training?

To recruit suitable participants we advertised primarily in Buddhist print and internet publications, and received 142 applications in total. The applicants were screened, since not all of them were physically or psychologically able to take part or had enough prior meditation experience. We then selected a group of 60 meditators and divided them randomly into two same-size groups, matched for age, sex, education, ethnicity and meditation experience. We also shipped 32 laptop computers all over America, Europe and Mexico in order to gather behavioral data on a variety of cognitive and emotional tasks before anyone was told whether they would be assigned to the initial retreat or the control group, to further verify that the groups were matched.

While the first group began their three-month retreat, the 30 in the control group were flown to the retreat center where they underwent the same tests as the retreat group at roughly the same time, but without embarking on the same intensive meditation practice. This was repeated at the middle and at the end of the first three-month retreat period. Three months after the first retreat had finished, the control group took part in the same three-month retreat program, again taught by Alan Wallace.

So on to Shambhala Meditation Center in Red Feather Lakes, Colorado, we went. [Picture 12](#)

shows a meditation lodge we were able to rent for over six months.

What was Alan teaching during these retreats ([Picture 13](#))? Two contemplative practices that are complementary. The first concerns focusing the mind. The second concerns cultivating beneficial aspirations so that trainees have a deep ethical embedding for undertaking focusing the mind. In terms of focused attention, the main technique was *mindfulness of breathing*. This involved, in brief, focusing on the sensations of the breath at the tip of the nostrils. When the mind wandered, the instruction was to gently release the distraction and bring the attention back to the breath. A second technique, called Settling the Mind in its Natural State, broadens that awareness to the field of all mental events, thoughts and images. The core instruction here is “whatever arises in the mind, do not be carried away by it and do not grasp onto or identify with it. Just let it be. Watch it arise, with discerning intelligence be aware of its nature, and let it slip back into the space of awareness without any judgment or intervention on your part[6]”. A third and more subtle technique is to find, within that field, your awareness itself and focus on that. You can learn more about these techniques from Alan’s book *The Attention Revolution*[6]. Beneficial aspirations included: loving-kindness, the wish for yourself and others to be happy; compassion, the wish for self and others to be free of the conditions of suffering; empathic joy, taking pleasure in other people’s success; and equanimity, not distinguishing those near to you from those far from you. These are the Four Immeasurables (see Alan’s book *Boundless Heart*[7]), as they are called in the Tibetan tradition, because it is thought they can be cultivated to an immeasurable extent.

What did we expect to find?

- (1) Improved ability to focus
- (2) Increased access to experience
- (3) Faster recovery from provocation
- (4) Diminution of destructive tendencies



Picture 12. Rigden Lodge at Shambhala Mountain Center in Red Feather Lakes CO was the location for training and data collection for the Shamatha Project. Each participant had a separate room and practiced as a group twice a day in the meditation hall (single story part of building). Control participants stayed at an adjacent building when on site for testing. Photo by Adeline Van Waning.



Picture 13. Alan Wallace teaching during the second 3-month retreat. Most evenings there was a short talk and an opportunity to discuss questions regarding the meditation practices and training taught by Dr. Wallace. Photo by Adeline Van Waning.

We took a very comprehensive approach in our investigation. We obtained self-report questionnaire data, physiological measures, and had participants perform laboratory-based emotion-related tasks, attention/emotion interaction tasks and attention-related tasks. We built two side-by-side state-of-the-art EEG and psychophysiology laboratories below the meditation hall and a blood lab ([Pictures 14–17](#)). All told, we conducted 15 computer-based experiments, took blood and saliva samples, conducted onsite interviews and shipped laptops and digital recorders to people's homes after the retreats were over so we could follow up the meaning of the training in terms of measureable cognitive effects as well as more subjectively in terms most meaningful to the participants.

So what did we find?

We looked at psychological improvements from a battery of questionnaires and we combined many traits into a term we call *adaptive functioning* and found that the retreat group showed a significant increase in this measure between the beginning and the end of the retreat, while the control group did not change in this measure at all – at least not until they themselves entered into their own retreat ([Figure 1](#)). An increase in adaptive functioning means there was an increase in well-being, mindfulness, empathy, ego resiliency, and a decrease in depression, anxiety, neuroticism and difficulties in emotion regulation. Notably, this change was sustained five months later (for both groups that underwent retreat). These findings are described in detail in a paper lead authored by Baljinder Sahdra, a Postdoctoral Scholar on the project and now a Lecturer in Psychology at the University of Western Sydney in Australia[8].



Picture 14. We built two side-by-side research laboratories within a large dorm room located underneath the meditation hall. Donated labor from Shambhala Mountain Center staff and local contractors enabled the construction to be finished just before we arrived with equipment to set up. Photo by Mark Corwin.



Picture 15. (Left). Equipment before installation in the control rooms. The sound attenuating ductwork and quiet blowers were for environmental comfort within the control and subject rooms. **(Right).** Interior of subject testing room. Usually it was dimly lit. Low light color video camera and remote pan/tilt mount used for unobtrusive recording of facial expression is normally hidden from view by the speaker enclosure sitting on the shelf below. Photos by author.

These findings were compelling. But it is also important to pair findings from questionnaires with objective measures such as cognitive task performance, physiology or our psychobiological markers. One such biological measure we investigated was *telomerase*, an enzyme responsible for restoring the length of telomeres. Telomeres are repeated DNA sequences that form a protective “cap” at the ends of chromosomes. However, the telomeres are not fully copied each time cells divide and hence grow shorter with each subsequent cell division. When telomeres grow too short, cells cannot divide. Telomerase, then, plays a crucial role in helping regulate telomere length. Furthermore, the length of telomeres in leukocytes (white blood cells) has been shown to predict longevity[9]. In our study, we measured telomerase levels in peripheral blood monocytes (PBMCs, a type of white blood cell) at the end of the first retreat and we then looked at the relationship between telomerase and our questionnaire measures. First off, we found changes in telomerase levels between our experimental groups: the retreat group had significantly greater telomerase levels than the matched control group, about 30% more. And what did we find in attempting to link our subjective and objective measures? We found that a change in the psychological sense of purpose in life[10] relates to the amount of telomerase you have after three months of intensive meditation practice.



Picture 16. (Left). Project RA Stephen Aichele (now a UC Davis graduate student) and Postdoctoral Scholar Tonya Jacobs applying active EEG electrodes at the start of an experimental session. This system allows high quality recordings of EEG to be made without a shielded room. **(Right).** Project RA David Bridwell (now a postdoctoral research at MIND Institute, Albuquerque, NM) and Dr. Jacobs collecting data during the emotion potentiated startle task. Leftmost screen monitors 88 channel EEG and ANS physiology. Facial EMG electrodes pick up eye-blink startles in response to loud sounds presented while viewing emotional images such as the hungry and suffering people shown at the upper right. Photos by author.



Picture 17. A local phlebotomist collected blood samples on site the morning after participants finished assessments. We built a blood laboratory adjacent to the EEG labs. **(Left).** Project RA David Bridwell extracts peripheral blood mononuclear cells (PBMCs) in preparation for counting as part of the telomerase assay protocol. **(Right).** Stephen Aichele prepares to count PBMCs under a microscope loaned to us by a participant physician. Dry ice cooled freezer (-78°C) is visible to the left of the table. Temperature controlled centrifuge is at the right. Photos by author.

In [Figure 2](#) you can see the positive relationship between these two measures in the retreat group but no such relationship in the control group, suggesting that it is the meditation training experience that is facilitating such a change. These data, prepared by project Postdoctoral Scholar Tonya Jacobs in close collaboration with Elissa Epel, Elizabeth Blackburn (a winner of the 2009 Nobel Prize in physiology/medicine for her role in the discovery of telomeres and telomerase) and Jue Lin at UCSF, are published[\[11\]](#).

I am not saying that meditation will make you live longer. I am not saying that meditation alone raises your telomerase levels or results in longer telomeres. The testing of that claim is for future work, but this kind of finding will motivate that work. It does look like activities that foster meaningful positive psychological change, such as meditation, positively impact cellular aging.

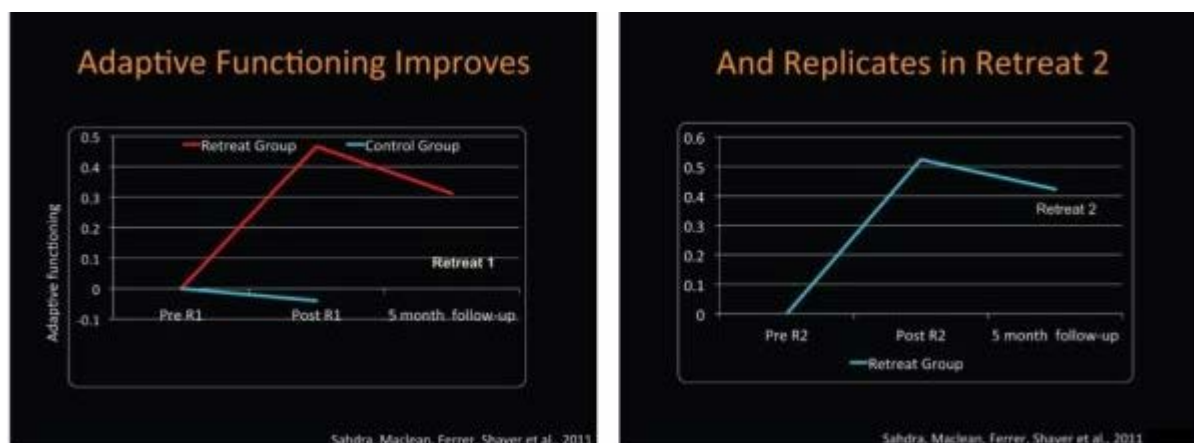


Figure 1. Latent variable composite of self-reported scores of psychological adaptive functioning improves for both retreats and improvements are maintained 5 months after training[8].

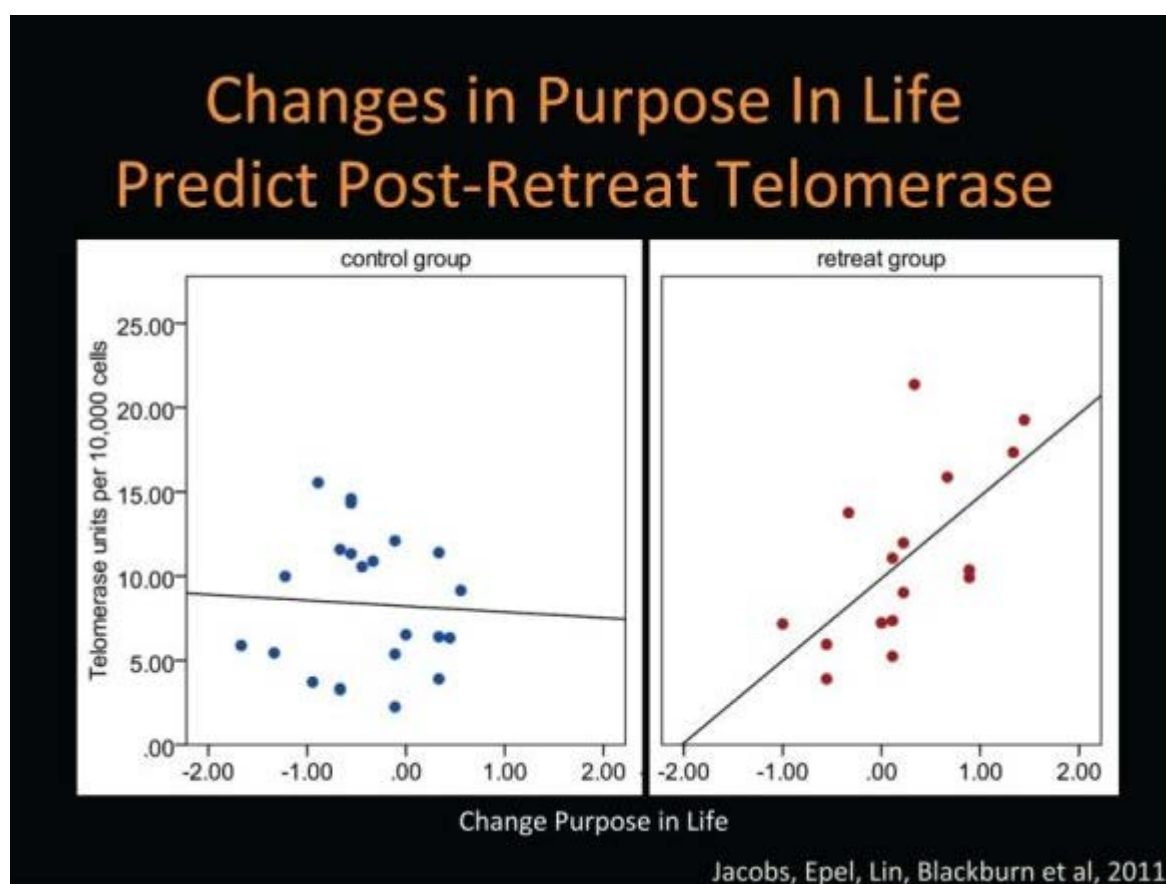


Figure 2. Change in a sense of purpose in life[10] between the start and end of the first retreat shows a relationship with telomerase levels in retreatants but not controls[11].

What other changes did we expect to find in our participants after a three-month intensive meditation retreat? Well, it makes intuitive sense for one of our hypotheses to be: the more you meditate, the more stable your attentional capacity grows. Indeed, if you perform an average of 500 hours of attention training via a meditation practice, it would be surprising if *no changes* were found in your ability to sustain your attention over long periods of time. However, it could be argued that training your attention while meditating only really serves your attentional capacity within that specific context. In order to test whether or not training your attention on the cushion extended to other situations (such is the claim of Buddhist training), we devised a task, spearheaded by Katherine MacLean – who was, at that time, a UC Davis psychology graduate student and is now an Instructor in Psychiatry at Johns Hopkins University – called the continuous performance task (CPT) for target detection[12],[13].

In this task, participants first see what looks like a long line.

Ninety percent of the time, during this tenth of a second stimulus, which occurs every two seconds or so, the line is long. Ten percent of the time, it is short. For the first 10-15 minutes of the task, we make it progressively harder to tell the difference between the short line and the long line by making the short line longer and longer. When participants reach about 75% accuracy in telling long from short we ask them to press the button every time they see a short line.

Both the retreat and control groups performed this task for thirty-two minutes, without a break. The two groups (control and retreatants) were both measured for their performance in this task pre-retreat. At this time point, there was no difference between the two groups. After five weeks of meditation, however, the retreat group was significantly better able to see a longer short line than the control group could[13]. They had increased vividness of perception, which was sustained at the end of the retreat and five months later at follow-up. When the control group went into retreat, by the midpoint of their retreat they showed the same pattern as the first retreat group, and this improvement was sustained at their five-month follow-up, provided people had been continuing to meditate each day (which was also true for the first retreat group finding)[13].

Results from the control group and pre-retreat data showed that when you are not meditating in retreat, your performance declines over time in this task, as was expected. However, by the midpoint of the retreat, and at the end, the meditators had better sustained ability to detect this target. Given the change in perceptual threshold, our hypothesis is that the ability to continue to detect these slightly shorter lines is actually related to changes in perception. This is an important point. It is not so much that sustained attention *per se* improved, but that the task actually got easier for the meditators because they were able to perceive the signal more easily, because their threshold to see small visual differences improved[13]. We will be following up these results by looking at fluctuations in brain electrical activity immediately before and after stimuli – it may be that part of the improved performance is also a training-related shift in the efficiency of paying attention such that our limited attentional resources are replenished in an ongoing manner by participants knowing when to be most vigilant and when to relax their focus. This new work is being undertaken by UC Davis neuroscience grad student Anahita Hamidi along with Postdoctoral Scholar Chivon Powers.

Such hypothesized effects of training on the activity of attention-related cortical areas during performance of the CPT are supported by our recently published findings obtained from EEG recordings taken during the practice of mindfulness of breathing. These results demonstrate training-related increases in activation of attention-related cortical regions[14]. University of Texas at Austin computer science grad student Manish Sagar (now a Postdoctoral Fellow at Stanford) carefully analyzed EEG data during meditation using advanced signal processing methods that minimize the contamination of the EEG signal by such things as scalp muscle tension. We found that over the course of the training there was a significant decrease in beta band activity (~12-20 Hz) overlying bilateral posterior frontal and parietal scalp regions. The changes were not observed in the control group, and replicated when the controls entered their own 3-month retreat. Decreased beta power is consistent with increased activations observed in fMRI and observed in the run-up to perceiving a hard-to-detect somatosensory signal[14].

We made another version of the CPT known as the response inhibition task (RIT)[8]. Instead of pressing the button when presented with the short line, participants were asked to press the button in response to all the *long* lines (which appear 90% of the time) and to *withhold* their response to the short lines. The short lines were still targets, but now a response to a target meant *stopping* the

habitual, frequent motor response of pushing the button. Just as with the CPT, there was, on average, a performance decline over time for participants at the start of the retreat. However, when individuals participated in the meditation retreats, they began showing less of a decline midway through the retreat, and slightly more so by the end of the three months (Figure 3).

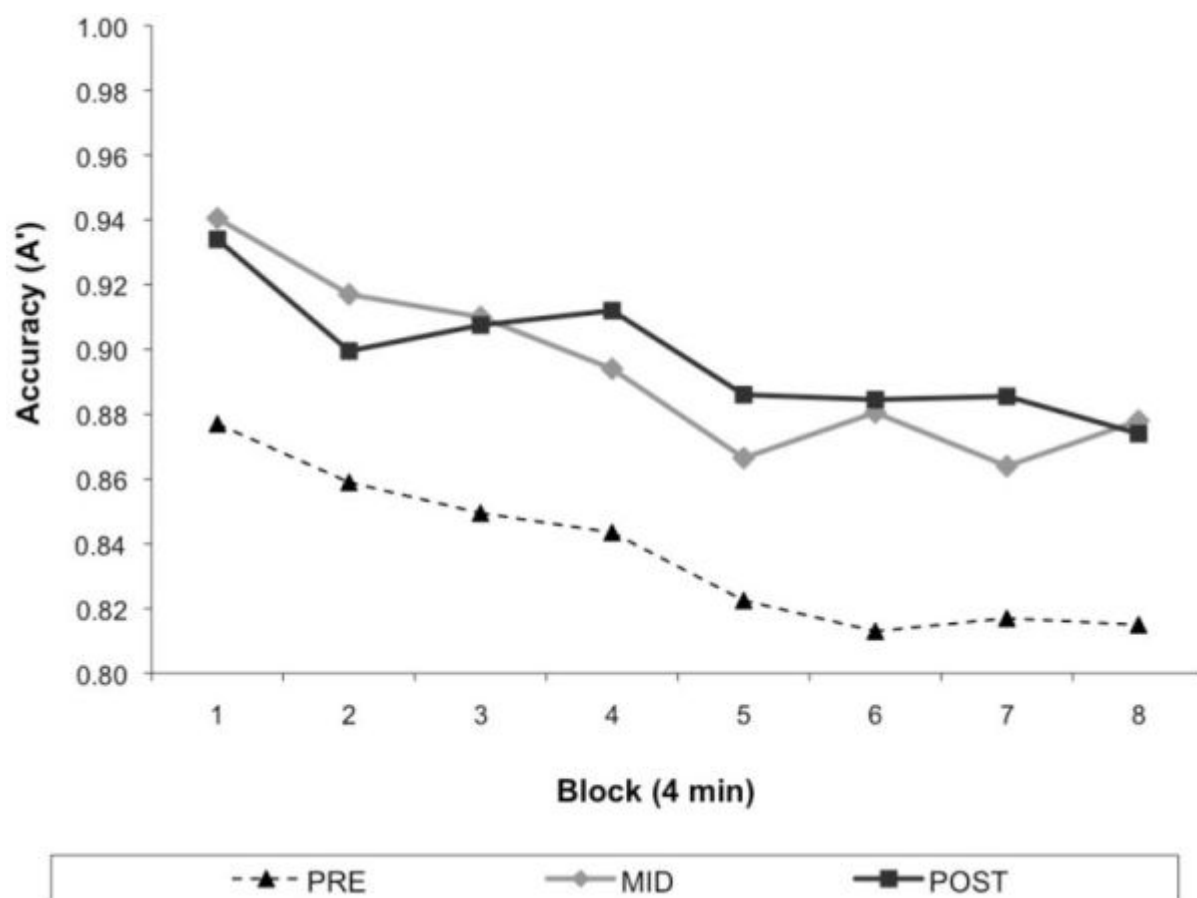


Figure 3. Accuracy performance during the 32-min response inhibition task. Response inhibition accuracy (A') plotted as a function of time on task (eight 4-min. blocks) for each of three testing points (pre-, mid-, and post-retreat) during training. Data shown for participants in both retreats (N=58) during their respective training periods. Overall response inhibition accuracy increased significantly from pre-retreat to mid-retreat. Reprinted from 8.

Importantly, through complex statistical modeling procedures, we found that improvements in response inhibition pre- to mid-retreat actually predicted individuals' improvements in psychological adaptive functioning pre- to post-retreat[8]. The beauty of this finding was its ability to connect a low-level, boring, cognitive response-inhibition experiment to participants' lived experience, as revealed from the battery of self-report questionnaires. In Buddhist teachings, individuals are encouraged to cultivate the ability to withhold knee-jerk responses in emotionally charged situations or relationships, and instead act from a more grounded and wise place.

What about emotion? We took a developmental approach to our study of emotions. Three months sounds like a long time to meditate full-time. However, in actuality, in terms of reshaping how you regard the world emotionally, it's not really that long. We were interested in examining facial expressions for differences in the way individuals respond to emotional provocation. We evoked emotion with short, intense film clips and we unobtrusively recorded participants' facial expressions while they watched these clips. Immediately after watching the film, we asked them to report about the emotions that occurred during the film using a cued recall procedure that relied on a visual storyboard of the clips.

One of the film clips that we showed to participants at the end of the retreat period was edited from

the movie *Fahrenheit 9/11*. The clip begins by showing scenes of daily life in Iraq prior to the war, such as kids playing in the streets and citizens frequenting restaurants. Next, the clip suddenly moves to scenes of bombing and missile strikes. It then alternates between soldiers talking about how they get pumped up to go into battle and scenes of war victims suffering. Eventually, other soldiers begin to reflect on the real consequences of their actions (see [Picture 18](#)), stating that “this ain’t no video game”, and more scenes of war victims are shown. In general we think that the contemplative training, particularly the practice of the beneficial aspirations in the context of a more stable attention will enable individuals to encounter suffering more directly. We expect less of a habitual emotional “rejection” of human suffering (for instance a disgust reaction to an image of a severe injury on a stranger).



Picture 18. On the right, you see a frame of unobtrusive facial video obtained while this woman watches a short edited clip from a documentary about the Iraq war (*Fahrenheit 9/11*) (left). This soldier is talking about how hard it is to see husbands carrying dead wives.



Figure 4. FACS codes for just 12 seconds of facial behavior. The highlighted box illustrates the action unit codes (numbers) and their intensities (letters) for the expression of grief in [Picture 18](#).

We then used a system called the Facial Action Coding System (FACS)[15] that describes 46 separate facial actions that can be visibly coded from video records. Two graduate students, Brandon King and Anthony Zanesco, led by emotion researcher and master FACS teacher Erika Rosenberg, coded, frame-by-frame, videos of participants watching the clips. They were able to identify precisely the timing and intensity of the movements of facial muscles (described as “action units”). By grouping the close occurrence of different action units together and using an emotional facial expression dictionary, we can infer the emotion someone was expressing at a particular moment in time ([Figure 4](#)).

This manuscript is currently under review with lead author Erika Rosenberg and the results of these analyses will be available upon publication.

Of course there are many aspects of our project that we have not been able to describe in this short chapter[16]. For instance, we have examined the relationship between changes in aspects of self-reported mindfulness and cortisol responses at the end of the retreats and shown less rise in afternoon cortisol at the end of the retreat (a time of potential psychological stress of separation given the closeness of community that grows when individuals sit together for months). Those individuals who showed the most increase in self-reported mindfulness had lower post-retreat afternoon/evening cortisol[17]. Importantly, we have begun to examine the meaning of the training experience in the words of participants expressed in structured interviews conducted by Baljinder Sahdra in the second three-month retreat. In close collaboration with Dr. Susan Bauer-Wu of

Emory University, Drs. Sahdra and Bauer-Wu and our colleague Rachel Whitworth have coded 33 interviews and arrived at a set of 151 thematic codes that reflect the collective set of responses to questions regarding broad areas of lived experience ranging from worldview to living conditions[18]. These data will allow us to relate changes we see in cognitive performance, brain activations, emotional responding and neuroendocrine and immune system regulators to what participants found personally most meaningful. This integration of first-person and third-person experimental data was a central core of the program of research in contemplative science envisioned by Francisco Varela[19].

In sum, we have described a general approach that can capture two important aspects of contemplative training that bear directly on the emergence of compassion (see [chapter 12](#)): establishing a more stable attention and achieving greater emotional balance. We have much more work to do and are excited at the chance to continue to mine this unprecedented dataset, with new support from a large grant from the John Templeton Foundation[20], helping to uncover ways in which contemplative practices can transform the mind and foster a deep compassionate regard for self and others.

[For up-to-date information on our publications and other articles.](#)

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PART 4

Compassion Training Programs



PART 4

Compassion Training Programs

I

The Mindful Self-Compassion Training Program

Christopher Germer / Kristin Neff

II

Cultivating Emotional Balance: Structure, Research and Implementation

Eve Ekman / Paul Ekman

III

Cognitively-Based Compassion Training (CBCT) – Protocol and Key Concepts

Brendan Ozawa-de Silva / Geshe Lobsang Tenzin Negi

IV

Compassion Cultivation Training (CCT)

Thupten Jinpa Langri / Leah Weiss

V

The ReSource Training Protocol

Boris Bornemann / Tania Singer

VI

Being with Dying – Curriculum for the Professional Training Program in Compassionate End-of-Life Care

Joan Halifax

VII

A Practical Guide to Classic Buddhist Meditation

Diego Hangartner

Box I

The Mindful Self-Compassion Training Program

Christopher
Germer



Kristin
Neff



The Mindful Self-Compassion Training

Program

“For someone to develop genuine compassion towards others, first he or she must have a basis upon which to cultivate compassion, and that basis is the ability to connect to one’s own feelings and to care for one’s own welfare... Caring for others requires caring for oneself.”

(Tenzin Gyatso, the 14th Dalai Lama[1])

Overview of the Mindful Self-Compassion (MSC) Program

The MSC program guides participants on an eight-week journey of self-discovery and self-transformation. Participants are invited to become explorers of their own experience, meeting whatever arises with curiosity and kindness. Difficult emotions and self-judgments will inevitably arise when we shine the light of loving awareness on our inner life. The purpose of the MSC program is to meet these moments with compassion, transforming them for the better. Self-compassion is a positive attitude that ultimately leads to a happier, more fulfilling life.

Since progress in self-compassion depends on how much a person practices – it’s “dose-dependent” – the primary task of MSC teachers is to help participants develop the self-compassion habit. The MSC program teaches a wide variety of meditations (e.g., loving-kindness, affectionate breathing) and informal practices (e.g., soothing touch, self-compassionate letter writing). Participants are encouraged to practice these techniques for a total of 40 minutes per day. An ideal combination might be about 25 minutes of sitting meditation and 15 minutes of informal practice each day. Formal sitting meditation strengthens one’s resolve and deepens our understanding of self-compassion, and informal practices help us to respond with self-compassion precisely when we need it the most.

A MSC group typically consists of 10-25 participants and, depending on the size of the group, one or two teachers. Teachers are expected to have: 1) at least 5 years of personal meditation experience; 2) an ongoing, daily practice of meditation and application of self-compassion in daily life; and 3) at least one year of loving-kindness meditation practice. In addition, they should have: 4) experience teaching meditation; 5) participated in an earlier MSC program; 6) taken a teacher training course; and 7) received (or be receiving) supervision from a MSC teacher trainer. It is advisable for one of the two teachers of a MSC program to be a trained mental health professional.

The MSC co-leaders primarily teach by modeling – by *embodiment* of self-compassion. Towards that end, teachers may wish to share personal stories that illustrate compassion for our human nature – human error, self-forgiveness and emotional resilience. Teachers are encouraged to stay attuned to the emotional needs of group members such that the participants “feel felt” by the teachers. Cultivating a warm, non-judgmental tone in the group is more important than delivering all the teaching points of a particular session. Teachers also encourage participants to support one another on the path to self-compassion by sharing their own experiences in a safe, confidential, respectful atmosphere. The MSC program is more like a seminar than group therapy, so members are asked to keep their comments as practice-focused as possible. The purpose of the course is to develop “capacity” – the healing resource of self-compassion – which then allows individuals to safely engage whatever difficulties may arise in their lives. Participants are also invited to consult

privately with a teacher about any personal issues that may interfere with their self-compassion practice.

Self-compassion training is a profoundly individual experience for each participant. During the eight-week program, group members learn 2 core meditations, 9 other meditations and 18 informal self-compassion practices, along with the rationale behind these practices. All the practices are described in a handout booklet, and the guided meditations can be downloaded from the Internet. Group participants are encouraged to be experimental in how they adapt the practices to their own lives. At the end of the course, the question is often raised, “What’s the best practice for me?” and the answer is, “The one you’re most committed to”. That’s usually a practice that’s carefully tailored to one’s individual needs, easy to use and has provided many moments of comfort and relief.

The MSC program is organized so that the themes of each session build sequentially upon each other:

Session 1. *Discovering Mindful Self-Compassion*

Session 2. *Practicing Mindfulness*

Session 3. *Practicing Loving-Kindness Meditation*

Session 4. *Finding Your Compassionate Voice*

Session 5. *Living Deeply*

Session 6. *Managing Difficult Emotions*

Session 7. *Transforming Relationships*

Session 8. *Embracing Your Life*

Session 1 is an introduction to the subject of self-compassion, to the structure of the program, and it’s an opportunity for the participants to become acquainted with one another. In session 2, participants learn mindfulness practices, especially affectionate awareness of breathing. Mindfulness helps us know when we’re feeling stress or emotional pain, which is a necessary precondition for compassion. We teach loving-kindness meditation in session 3, the core practice of the MSC program. Session 4 expands loving-kindness into daily life, showing how to “warm up” the everyday conversations in our minds. Session 5 focuses on core values and commitments. To be truly self-compassionate, we need to know what really matters in our lives and respond to those deeper needs. The mini-retreat follows the 4th or 5th session and provides an opportunity for extended self-inquiry in a supportive group environment. By the 6th session, the core practices of the MSC program have been taught and we begin to apply them to manage difficult emotions (session 6) and transform challenging relationships (session 7). Finally, in session 8, we shift our attention to embracing the positive aspects of our lives, and discuss how to take self-compassion home after the program ends.

Most sessions begin with 20 minutes of meditation practice followed by 20 minutes of group discussion under the banner, “How is your practice going?” Then the topic of the day is introduced, such as “What is mindfulness?” or “Finding your compassionate voice”. Every effort is made to anchor new ideas in direct experience using class exercises, meditations or informal take-home practices. Poetry also helps participants to experience new concepts at an intuitive or visceral level. In the MSC program, we use poems written by previous course participants as well as poets

such as Mary Oliver (*The Journey, Wild Geese*)[2], Naomi Shihab Nye (*Kindness*)[3], Billy Collins (*Aimless Love*)[4], Derek Walcott (*Love after Love*)[5] and David Whyte (*All the True Vows*)[6].

Sessions close with another question and answer period, a home practice assignment to carry the topic into daily life, and a brief meditation. Course members are given home practice monitoring sheets to record how much they meditate each day, what meditation or combination of meditations they're doing, and how often each day they remember to use informal practices. The self-monitoring sheets are primarily a reminder to practice self-compassion every day.

A complete training manual with protocols for each session will be published in 2014 by the authors. Additional resources are books by Kristin Neff (*Self-Compassion: Stop Beating Yourself Up and Leave Insecurity Behind*)[7] and Christopher Germer (*The Mindful Path to Self-Compassion: Freeing Yourself from Destructive Thoughts and Emotions*)[8], and the following websites: www.Self-Compassion.org and www.MindfulSelfCompassion.org where students can download guided meditations. The following synopsis of the MSC program focuses on the key ideas and practices introduced in each session. The reader is also advised that changes will be made over the coming years as the program continues to develop.

Session 1: Discovering Self-Compassion

The main question of self-compassion training is "What do I need?" The goal for our patients is to become mindfully aware when they're suffering ("Ouch!" "This is a moment of suffering", "This hurts!") and to respond in a comforting, affectionate manner. That response can come in an infinite number of ways, such as drinking a cup of tea, taking a hot bath, talking with friends, exercising or listening to music. For some people, meditation is especially helpful. For others, perhaps anti-anxiety or anti-depressant medication may be the best way to take care of oneself. Participants are encouraged to explore how they care for themselves *already*, and to begin to explore how they can bring kindness to themselves particularly when they suffer, fail or feel inadequate.

When things go wrong in our lives, we're usually more comforting and soothing towards others than towards ourselves. What does it actually mean to comfort ourselves? Three subsystems of the nervous system are introduced in session 1 – *threat*, *reward* and *soothing*[9],[10]. Self-compassion means activating the soothing system through various means, such as the power of touch. An exercise of placing one's hand over the heart – sensing the warmth of the hands, the gentle pressure of the hand on the chest, and feeling the rhythmic movement of the breath underneath the hand – is taught in session 1 as a way of activating the soothing system.

Participants of the MSC program learn the meaning of self-compassion in the first session. This can take place through a PowerPoint presentation and/or lecture, class exercises and poetry. Course members also learn what self-compassion is *not*. It's not:

- *Sugarcoating* – We're opening to pain more fully, not bypassing it.
- *Egoistic self-esteem* – It's a way of relating to ourselves kindly, not evaluating ourselves as better than others.
- *Complacent* – It's a force of will – good will. Self-compassion takes courage, and motivates change by providing the emotional resources needed to learn and grow.
- *Self-indulgent* – It's concerned with the alleviation of suffering, and therefore chooses long-term health and well-being over short-term pleasure.
- *Self-pity* – We're disentangling from pain by entering into it, but we're not wallowing in it.





- *Exhausting* – We’re struggling less, not more.
- *Selfish* – It’s the first step towards compassion for others.
- *Unnatural* – We’re all born with the wish to be happy and free from suffering. Self-compassion reminds us of that original desire and helps us to live in accordance with it.

Classroom exercises, either involving interaction between group members or individual reflection and meditation, anchor lecture topics in direct, personal experience. The following exercise is taught in session 1 to illustrate the three key components of self-compassion (described earlier in this chapter):

Self-Compassion Break

Bring to mind an experience you’ve had that makes you feel badly, but only *moderately* badly so that you can feel the stress in your body without becoming overwhelmed by it. Visualize the situation until it makes you feel a little uncomfortable.

Now, say to yourself:

- This is a moment of suffering (mindfulness)
- Suffering is a part of life (common humanity)

Now put your hands over your heart, feel the warmth of your hands, the gentle pressure of your hands, and notice your chest rhythmically rising and falling beneath your hands as you breathe. Say to yourself:

- May I be kind to myself in this moment (self-kindness)
- May I give myself the compassion I need

For the last one or two phrases, use whatever words speak to your particular situation, such as:

- May I be strong
- May I be safe
- May I forgive myself
- May I accept the circumstances of my life
- May we learn to live together in peace

All exercises are followed by guided discussion. After the self-compassion break, for example, group members are asked what they experienced during the exercise. Most report that they felt a little “letting go” as each successive element of self-compassion was introduced.

Participants are encouraged to use the Self-Compassion Break during the following week, and to complete a home practice assignment for Session 1 – Self-Compassionate Language. In that assignment, participants note what types of things they typically judge themselves for (i.e., job performance, overeating), what they say to themselves when they notice a flaw or mistake (“You’re stupid!” “You’re lazy!”), and reframe the language to be kinder, more supportive and understanding,

like a good coach (“It takes a while to perform well at this new job. Do your best, but take it one day at a time.”).

Session 2: Practicing Mindfulness

Session 2 introduces the theory and practice of mindfulness. Mindfulness is “awareness of present experience with acceptance”[11], but that isn’t our usual mode of operating. During much of our lives, we’re preoccupied with problems that arose in the past and problems that may occur in the future – regret and worry. This was probably a good evolutionary strategy for survival but it isn’t a prescription for happiness. Therefore, we begin session 2 by introducing the “default mode network” – brain regions that are activated whenever we’re distracted and the mind wanders, which it usually does after a few seconds of meditation[12]. Inevitably, we experience more stress when the mind is wandering than when it’s focused on present-moment experience.

The default mode network activates a sense of “I”, “me” and “mine”, which introduces duality into our lives and differentiates our personal needs and expectations from what’s happening in the present moment. And the more we fight or resist what’s occurring in our experience (“This should not be happening!!!”), the more we suffer. The formula is: $\text{Suffering} = \text{Pain} \times \text{Resistance}$. For example:

By fighting sleeplessness, we can create insomnia

By fighting anxiety, we can create panic

By fighting grief, we can develop depression

By fighting back pain, we can create chronic pain syndrome

By fighting your daughter’s lousy boyfriend, you get a lousy son-in-law!

Pain is inevitable in life; suffering is optional. Mindfulness is the opposite of resistance; it’s a methodology to reduce unnecessary resistance and suffering.

There are 3 skills we can learn under the umbrella of mindfulness meditation, at least as it’s practiced in the western hemisphere[13].

1. Focused attention – concentration
2. Open monitoring – mindfulness *per se*
3. Loving-kindness and compassion

Focused attention calms the mind: We practice concentration to help anchor our attention when it’s being buffeted by strong emotions. Open monitoring expands our field of awareness so we can know what is happening as it is happening. This helps us notice if we’re getting carried away by a dramatic storyline, and helps us let go of our resistance to the reality of the present moment. Loving-kindness and compassion are means to comfort and soothe ourselves through the inevitable pain of life. While mindfulness is aimed at experience itself, compassion is aimed at the *experiencer* who is suffering.

In session 2, we teach MSC participants not only to meet their experience with awareness, but also with tender, warmhearted or loving awareness. A core meditation of the MSC program is





Affectionate Breathing. Attention to the breath calms the mind by limiting the time it wanders into stressful preoccupations. Affectionate Breathing meditation encourages participants not only to bring their attention back again and again to the sensation of breathing, but to do it in a gentle, non-judgmental, warmhearted manner. We learn to appreciate how the breath brings life to the body even when we're paying attention to other things – it breathes *us*. The breath also comforts with its soothing rhythm, like the rising and falling of the sea.

For download of the Affectionate Breathing meditation, please go to <http://www.self-compassion.org/guided-self-compassion-meditations-mp3.html> and click on “Affectionate Breathing” for an mp3 file of that meditation

Some people do not feel comfortable focusing on the breath, such as traumatized people who feel disconnected from their bodies. Therefore, we offer two other methods for grounding awareness – Soles of the Feet[14] and the Here-And-Now-Stone meditations. The former technique is essentially walking meditation with a narrower focus on the soles of the feet. Participants of the MSC program also receive a polished stone that they can keep in their pocket to rub and feel, anchoring themselves in sensory awareness when they're overcome with emotional distress.

From session 2 onward, participants are encouraged to practice self-compassion skills for 40 minutes each day. Beginners are advised to start with shorter meditations, maybe only 10-15 minutes, and to make it as pleasant as possible. The home practice assignment for session 2 is Mindfulness in Daily Life. Participants pick a single activity in the day, such as brushing one's teeth or walking to the bus, and focus attention on the physical sensations involved in that activity. Mindfulness in daily life enables people to slip out of their ruminating mindsets and remain present in daily living.

Session 3: Practicing Loving-Kindness Meditation

The bulk of the MSC program cultivates the third skill of mindfulness meditation – loving-kindness and self-compassion. Whereas loving-kindness is “the wish that all sentient beings be *happy*”, “compassion is the wish that all sentient beings be *free from suffering*”[15]. In the MSC program, we focus on compassion – generating a loving response to suffering – yet we use the traditional method of loving-kindness (*metta*) meditation to achieve that goal[8],[16]. Loving-kindness meditation is the second core meditation of the MSC program. Traditional loving-kindness meditation uses language – short phrases – as the object of meditation, such as “May I and all beings be safe” and “May I and all beings be happy”. However, in the MSC program, we introduce phrases specifically designed to cultivate self-compassion.

For download of the following meditation, please go to http://www.mindfulselfcompassion.org/meditations_downloads.php and click on “Self-compassion meditation” for an mp3 file of that meditation

Loving-Kindness and Self-Compassion Meditation

Sit in a comfortable position, reasonably upright and relaxed. Fully or partially close your eyes. Take a few deep breaths to settle into your body and into the present moment. Put your hand on your heart for a moment as a reminder to be kind to yourself.

- Form an image of yourself sitting down. Note your posture on the chair as if you were seeing yourself from the outside.
- Now bring your attention *inside* your body and feel the pulsation and vibration of your body.

- Locate your breathing where you can feel it most easily. Feel how your breath moves in your body, and when your attention wanders, gently feel the movement of your breath once again.
- After a few minutes, start to notice *physical sensations* of stress that you're holding in your body, perhaps in your neck, jaw, belly or forehead.
- Also notice if you're holding some *difficult emotions*, such as worry about the future or uneasiness about the past. Understand that every human body bears stress and worry throughout the day.
- Now offer yourself goodwill *because* of what you're holding in your body right now. Say the following phrases to yourself, softly and gently:

May I be safe.

May I be peaceful.

May I be kind to myself.

May I accept myself as I am.

- When you notice that your mind has wandered, return to the words or the experience of discomfort in your body or mind. Go slow.
- If you are ever overwhelmed with emotion, you can always return to your breathing. You can also name the emotion, or find it in the physical body and soften that area. Then, when you're comfortable, return to the phrases.
- Finally, take a few breaths and just rest quietly in your own body. Know that you can return to the phrases anytime you wish.
- Gently open your eyes.

This practice is more difficult than it appears and Session 3 addresses many of the obstacles that are likely to arise. The purpose of the loving-kindness and self-compassion meditation is to activate an affectionate attitude in which our experience, and who we are, can be warmly embraced. In actual practice, often we feel good, sometimes we feel bad and frequently we feel nothing at all. Therefore, we should not judge our meditation by how good we feel moment-by-moment. We're cultivating loving intentions, not pleasant feelings, although an enhanced sense of well-being is an inevitable byproduct of loving intentions[17].

We need to be patient with the process. There's a Jewish story to illustrate this[18]:

A disciple asks the rabbi: "*Why does Torah tell us to 'place these words upon your hearts'? Why does it not tell us to place these holy words in our hearts?*"

The rabbi answers: "*It is because as we are, our hearts are closed, and we cannot place the holy words in our hearts. So we place them on top of our hearts. And there they stay until, one day, the heart breaks and the words fall in.*"

Participants are also encouraged to create their own phrases, phrases that do not cause distress or an argument in one's mind. The home practice assignment of session 3 is to find a few, simple phrases that feel authentic and can be used over and over in meditation. The rule of thumb is "What do I need to hear?" The phrases used in meditation should remain the same over time to



foster calmness through concentration and repetition, but in everyday life the phrases can be changed to fit the situation. Practitioners should also “stick to the wishing side” of the phrases – the good will – and not be too specific about outcome, such as “May I be free of my diabetes”. We’re tenderly inclining our hearts towards ourselves, not trying to manipulate the conditions of our lives. Also, the “may I” aspect is used like the conditional/subjunctive in Romance languages – “that it would be so...” – rather than appealing to an external higher power.

Part of the healing process of loving-kindness meditation is the phenomenon of *backdraft*. Backdraft occurs when a firefighter opens a door with a hot fire behind it. Oxygen rushes in, causing a burst of flame. Similarly, when the door of the heart is opened with compassion, intense pain can sometimes be released. Some people, especially those with a trauma history, can experience “fear of compassion”^[19]. Backdraft exposes us to old relational suffering, even from early childhood, and allows it to be desensitized by the warmth and good will cultivated in the mind of the meditator.

If resurfaced memories are too disturbing to be desensitized, the practitioner may consider the following modifications to loving-kindness meditation, in the following order:

1. Continue using the phrases, allowing the difficult feelings to become like background noise. If there is still too much distress, then:
2. Shift to open monitoring practice – naming the disturbing emotion (“anger”, “grief”, “shame”) or finding the physical manifestation of the emotion in the body (tension in the stomach, hollowness in the heart region) and placing a warm hand on that body part.
3. Switch to loving-kindness for a loved one, such as a pet or a beloved child, and eventually include yourself in that circle of kindness.
4. Anchor your awareness with focused awareness on the breath, a single body sensation like the soles of the feet, or an external object like ambient sounds in the environment.
5. Stop meditating and be kind to yourself in other, more behavioral, ways, such as a warm bath, a cup of tea or stroking your pet.

Progress in self-compassion can be measured by the refinement of intention. We all start out by striving to feel better through self-compassion, then we become disillusioned when we still feel bad at times, and finally we learn to embrace ourselves “not to feel better, but *because* we feel bad”. It’s a riddle. When self-compassion training is used to manipulate our moment-to-moment experience it will inevitably fail because that’s a subtle form of resistance. But when we’re kind to ourselves simply *because* we feel bad, as we might be towards a child with the flu, then profound relief occurs as an inevitable side effect. As meditation teacher Rob Nairn put it, our goal is to “become a compassionate mess”^[20].

Session 4: Finding Your Compassionate Voice

After learning to meditate with phrases that support our good intentions, the next step is to shape the inner conversations that dominate our lives, shifting them from self-criticism (“You fool!”) to *self-encouragement* when things go wrong (“That didn’t work, but it was a good try. Let’s try a different approach.”). We always come by our self-criticism honestly. When we’re threatened *externally*, a natural response is to fight off the danger, but when we’re threatened *internally* by disturbing emotions such as dread, despair or shame, we’re likely to attack ourselves with self-criticism. It’s not our fault.

At a deeper level, we criticize ourselves to feel safe[21]. For example, we commonly believe that self-criticism helps us:

- Avoid future mistakes.
- Improve as a person.
- Repair relationships with people we have offended.
- Remain internally connected to early childhood caregivers.

First, MSC participants are given an opportunity to reflect on how self-criticism appears to help us improve ourselves, then we go over the research described above, which shows that harsh self-criticism actually undermines motivation while self-compassion promotes it. The distinction between self-judgment and discernment is made, and we discuss how by giving ourselves encouragement and support, our field of awareness stays open and we can discover what went awry and correct mistakes we have made. With self-compassion we try to grow and change not because we are inadequate, but because we care about ourselves and don't want to suffer needlessly.

These messages are reinforced during session 4 in a group exercise called Finding Our Compassionate Voice. We start by asking the participants to think of a behavior they would like to change and about which they criticize themselves, such as procrastination, not exercising or impatience. Then they write down what they actually say to themselves and how it makes them feel. The most interesting part of this exercise is a reflection on how the "inner critic" is actually trying to keep a person safe from harm, even if it hurts and is ultimately unproductive. The final steps are to thank the inner critic and make space for a new voice, the voice of the "compassionate inner self". One participant remarked, "I used to say to myself 'Hey Bitch'. Now I say 'Whoa Tiger!'"

Finding one's compassionate voice continues in a home practice assignment titled Compassionate Letter to Myself in which we write a spontaneous and uncensored description about a problem that leaves us feeling mildly ashamed or inadequate. Then, imagining an unconditionally loving and understanding friend, we write a letter to ourselves from the perspective of the friend, focusing on the perceived inadequacy and gentle suggestions for change, while infusing the letter with a strong sense of the friend's kindness and caring.

In session 4 we also discuss how self-compassion is critical for caregivers, who can become exhausted by caring for others without giving themselves the kindness and support they need. We discuss the importance of traditional strategies for caregivers such as drawing appropriate boundaries and engaging in self-care strategies (exercise, time with friends, etc.), but also provide strategies for staying in the *presence* of suffering with equanimity. Often when dealing with someone who is really hurting, the majority of our attention has to be on giving compassion to ourselves for the empathetic pain we are experiencing, so that our hearts can remain open and available.

We teach participants a practice they can take with them when they need it – Breathing Compassion In and Out. This meditation is derived from the Tibetan practice of "giving and taking" (*tonglen*)[22]. In that traditional meditation, the practitioner inhales the pain and suffering of another individual and exhales kindness and compassion. This process subtly reverses our instinctive tendency to resist or avoid emotional discomfort that inevitably leads to more suffering. For stressed caregivers, however, we teach them to breathe in compassion for themselves as well as breathing out compassion for others, so that their burden is as light as possible. This meditation





can be practiced formally or informally throughout the day for any length of time.

For download of the following meditation, please go to http://www.mindfulselfcompassion.org/meditations_downloads.php and click on “Breathing Compassion In and Out” for an mp3 file of that meditation

Breathing Compassion In and Out

- Sit comfortably, close your eyes, and take a few relaxing breaths.
- Scan your body for physical stress, noting the location and quality of the discomfort. Also allow yourself to become aware of any stressful emotions that you may be holding in your field of awareness. If a challenging person comes to mind, let yourself be aware of the stress associated with that person. If you are experiencing the suffering of another person through empathy, let yourself be aware of that discomfort as well.
- Now, aware of the stress you are carrying in your body, inhale fully and deeply, drawing compassion inside your body and filling every cell in your body with compassion. Let yourself be soothed by inhaling deeply, and by giving yourself the compassion you deserve when you experience discomfort.
- As you exhale, send out compassion to the person who is associated with your discomfort, or exhale compassion to living beings in general.
- Continue breathing compassion in and out in a normal, easy rhythm. You can experiment with “warming up” your breathing, perhaps by inhaling and exhaling “light”, “warmth”, “tenderness”, “soothing”, “comfort”, “ease”, “love”, “compassion” or “kindness”. Occasionally scan your inner landscape for any distress and respond by inhaling compassion for yourself and exhaling compassion for those who need it.
- Gently open your eyes.

By now, MSC group members have learned the two core meditations of the MSC program – Affectionate Breathing and Loving-Kindness Meditation – and a variety of informal practices such as the Self-Compassion Break, Mindfulness in Daily Life, Soles of the Feet, and Breathing Compassion In and Out. Participants receive support from the co-leaders and other group members to practice 40 minutes each day, making the practice as natural and delightful as possible. We say, “If it doesn’t feel like a long exhale – “ahhhhhhhhh” – then it isn’t self-compassion”. If it feels like a task or a chore, we explore together how to make self-compassion practice more pleasant, like play.

The Retreat

A 4-hour retreat that occurs after session 4 or 5 is an opportunity to strengthen and deepen one’s meditation practice in a supportive environment. It’s conducted primarily in silence, except for instructions by the co-leaders. The retreat schedule is flexible and follows the needs of the group. New meditations are also introduced, including the Compassionate Body Scan, Pleasure Walk, Compassionate Walking, Restorative Yoga and Mindful Eating. All meditations remind the practitioner to bring a warm, affectionate quality of attention to their efforts. For example, in the Compassionate Body Scan, the instructions begin with placing their hands over the heart, and then we move our awareness through the body, sensing and allowing our sensations to be as they are, occasionally evoking gratitude for the selfless work of a body part or the wondrous way that it functions on its own. We also incline our attention in a loving way towards the body as a mother

might incline towards a newborn child. The Restorative Yoga includes postures that comfort and soothe, such as the child's pose[23]. The Pleasure Walk is the practice of noticing delightful aspects of our environment for 15–20 minutes, one perception after another, like a bee extracting pollen from a flower and moving on to the next.

Pleasure Walk

- It's best if you can take the walk in nature but any outdoor walk will do (like walking from your office to the bus stop, and so on). The goal of the walk is to notice as many pleasurable things as possible, slowly, one after another. Use all your senses – sight, smell, sound, touch... maybe even taste.
- How many happy, beautiful or inspiring things can you notice while you're walking? Do you enjoy the fresh air, the warm sun, a beautiful leaf, the shape of a stone, a smiling face, the song of a bird, the feeling of the earth under your feet?
- When you find something delightful or pleasant, let yourself go into it. Really enjoy it. Feel a tender leaf or the texture of a stick, if you like. Give yourself over to the experience as if it were the only thing that existed in the world. And when you are ready to discover something new, let it go and wait until you discover something else that is pleasurable and delightful to you.
- Be like a honeybee going from one flower full of nectar to another. When you are full with one, go to another.
- Take your time and enjoy!

The retreat closes with a Compassion Bowl in which each group member receives two pieces of paper and writes one compassionate wish for him or herself ("May I...") and another wish for all beings ("May all beings..."). Then these wishes are read out loud to the entire group as they are placed in a basket, which is later burned in a campfire, symbolically sending the compassionate wishes to the heavens (Andrew Moore, personal communication, 2010).

Session 5: Living Deeply

Most of our suffering is nestled in a core value. For example, if you value free time, getting laid off from work is a blessing. If you value supporting your family, losing your job can be a catastrophe. To be truly compassionate with ourselves, we need to know what matters to us and to respond accordingly. This session is an exploration of core values, such as "being a good friend", "living a healthy lifestyle", "being happy" or "alleviating the suffering of others." We don't invent our core values so much as discover them by reflecting on the choices we've made throughout our lives, especially after our goals have been achieved, such as going to college, getting married, having children and buying a house. Core values are a direction, not a destination[24].

The following exercise was adapted from Acceptance and Commitment Therapy protocol[25].

Discovering Core Values

- Imagine that you have the good fortune to attend your own funeral and can listen to your own eulogy. What you hear leaves you feeling deeply contented because what was said is truthful and reflects how you actually lived your life from this day forward. What were the key themes that you heard in your eulogy? ("He was a good friend." "She was a great mom.") What are your core values that were articulated at your funeral?





- Now, please write down any ways you feel you are *not* living in accord with your core values. For example, perhaps you are too busy to spend much quiet time in nature, even though nature is your great love in life.
- Now, please write down if there are *obstacles* getting in the way of you living in accord with your core values – especially internal obstacles. For instance, are you shy, afraid to take risks, or living your life according to someone else’s values?
- Finally, write down how self-kindness and self-compassion may help you live in harmony with your true values, especially by helping to overcome internal obstacles. Is there a way it could help you feel safe and confident enough to take new actions, or let go of things that aren’t serving you? Or if there are insurmountable external obstacles to living in accord with your values, can you have compassion for that as well?

Following this exercise, group members are invited to state a “vow” that can remind them about what they value most. For example, “I vow to be a friend to all living beings”. When we make a vow, we aren’t making an unbreakable contract. It’s more like being engaged than married – a statement of intention. A vow is like the breath in meditation to which we continuously reorient our attention when we notice our attention has gone astray. A vow makes our daily life like a meditation. The home practice assignment of session 5 is to repeat the vow every morning and night, and whenever stress arises during the day, noticing any impact it may have on one’s moment-to-moment experience.

Session 6: Managing Difficult Emotions

By session 6 in the MSC course, some participants feel the initial rush of enthusiasm for self-compassion has begun to subside and mild disillusionment with the process starts setting in. Therefore, we introduce the three *stages of progress* in self-compassion: 1) striving; 2) disillusionment; and 3) true acceptance. Everyone begins self-compassion practice with the wish to reduce emotional stress. We may have actually had a breakthrough and started feeling better, so we naturally believe that self-compassion can replace bad feelings with good feelings. The problem, as described earlier, is that our intention subtly shifts away from caring for ourselves *because* we feel bad and we start trying to manipulate our moment-to-moment experience. This is the “disillusionment” phase – “It’s not working!” The disillusionment phase, which often occurs around session 6 if not sooner, is an important part of the transformation process. We can move into “true acceptance” when we realize that pain is unavoidable in life and a tender response is the healthiest response to it, eventually leading to long-term happiness.

How do we manage difficult emotions? In session 6, we bring all three skills of mindfulness meditation to bear – focused attention, open monitoring and compassion. We also remind participants that we’re not trying to open to pain willy-nilly, but rather we slowly open to emotional pain, in stages:

1. *Curiosity* – turning towards discomfort with interest
2. *Tolerance* – safely enduring
3. *Allowing* – letting feelings come and go
4. *Friendship* – embracing, seeing hidden value

The stages correspond to a gradual letting-go of resistance to unpleasant experience.

The meditations taught in session 6 are Labeling, Mindfulness of Emotion in the Body, and Soften-Soothe-Allow. When we label an emotion (“This is anger.” “Fear is arising.”), we usually feel some emotional freedom – some space opens up around the feeling and the intensity of the emotions decreases[26]. “Name it and you tame it.” Furthermore, emotions have physical and emotional components – thoughts and body reactions. For example, when we’re angry, we spend a lot of time in our minds justifying our position and planning what we will or should have said. We also feel physical tension in the abdomen as the body prepares for a fight. It’s more difficult to manage a difficult emotion by chasing around our thoughts than by exploring the slower, physical component. When we *locate and anchor* our emotions in the body – find where the emotion is located in the body – the difficult emotion starts to change. Participants of the MSC program are taught how to label emotions (validating the feeling in a gentle, understanding voice), and also how to find the emotion in body sensation. Then they learn the following exercise:

For download of the following meditation, please go to <http://www.self-compassion.org/guided-self-compassion-meditations-mp3.html> and click on “Soften Soothe Allow” for an mp3 file of that meditation

Soften-Soothe-Allow

- *Soften* into that location in your body. *Let* the muscles be soft without a requirement that they *become* soft, like simply applying heat to sore muscles. You can say, “soft...soft...soft...” quietly to yourself, to enhance the process. Remember that you are not trying to make the sensations go away – you are just being with them with loving awareness.
- If you wish, let yourself just soften around the edges, like around the edges of a pancake. No need to go all the way in.
- *Soothe* yourself for struggling in this way. Put your hand over your heart and feel your body breathe. Perhaps kind words arise in our mind, such as, “Oh my dear, this is such a painful experience. May I grow in ease and well-being”.
- If you wish, you can also direct kindness to the part of your body that is under stress by placing your hand in that place. It may help to think of your body as if it were the body of a beloved child. You can say kind words to yourself, or just repeat, “soothe...soothe...soothe”.
- *Allow* the discomfort to be there. Abandon the wish for the feeling to disappear. Let the discomfort come and go as it pleases, like a guest in your own home. You can repeat, “allow...allow...allow”.
- “Soften, soothe and allow.” “Soften, soothe and allow.” You can use these three words like a mantra, reminding yourself to incline with tenderness towards your suffering.
- If you experience too much discomfort with an emotion, stay with your breath until you feel better.
- Slowly open your eyes when you’re ready.

We can address feelings of shame in the same way – soften-soothe-allow. When things go very wrong in our lives, we’re often exposed to deep self-doubts originating in childhood that undermine our sense of self-worth. These are negative core beliefs, or self-schemas: “I’m unlovable.” “I’m a failure.” “I’m defective.” “I’m stupid”[27]. We’re ashamed of these qualities and struggle to keep others from seeing them. In other words, shame arises as a response to negative core beliefs. Core beliefs are the foundation of many other negative emotions such as anger, fear, envy or hatred, so that when we establish a friendlier relationship to these “shameful” personal qualities,

we can eliminate a mountain of emotional suffering. To do so, we follow the same procedure as above – label the negative core belief, find where in our bodies we’re experiencing shame about that belief, and then practice soften-soothe-allow. This exercise closes with the reminder that our beliefs about ourselves are just that – *beliefs*, not facts – and our goal is to hold *all* of who we think we are, all our “selves”, in loving awareness.

The home practice assignment for the week is to apply soften-soothe-allow technique whenever emotional stress arises during the day.

Session 7: Transforming Challenging Relationships

All relationships include pain. Sartre[28] famously said, “Hell is other people”. Challenging relationships may be current ones or much older relationships with deceased friends and relatives. The “difficult” or “challenging” person is one who has hurt us, and we may struggle with the pain and the person long after the difficult times have passed. And we can’t avoid difficult people in our lives, not even when we’re alone at the top of a mountain – our minds are populated with people. Therefore, learning to transform difficult relationships is the best thing we can do for ourselves.

There are at least two types of relational pain: 1) the pain of disconnection; and 2) empathic pain – feeling for the suffering of others, like one’s children in distress.

A key ingredient in dealing with relational pain of all kinds is self-compassion – opening to the suffering we bear, often unconsciously, and responding with kindness and comfort to our burden.

We’re hardwired to feel the pain of others, sometimes contagiously, through the action of our mirror neurons. Mirror neurons subtly mimic in our own musculature what we see in others, thereby giving us a sense of what others are feeling[29], [30]. This process is illustrated in a class exercise in which two people face each other and take turns showing expressions of anger, disgust, fear, happiness, sadness, etc. The observer usually finds it easy to experience the expressed emotion in his or her own body.

In partner relationships, our true feelings manage to leak out even when we try to hide them. For example, if I’m angry, I might stare for a split second too long, or frown when I’d rather have smiled, and then my partner says, slightly annoyed, “Why are you so angry?” and I think, “Me? Why are *you* so angry?” Actually, we’re *both* angry. We can’t know another person is angry unless we’re a little angry ourselves. Therefore, due to our mirror neurons, others are always partly responsible for our own emotions, and we’re always partly responsible for the emotions of others. To have smooth and happy relationships, our moment-to-moment interactions need to be suffused with warmth and good will. Our intentions leak out in microcommunications – the tone of the voice, the flicker of an eye – so we can’t hide our intentions very long. When we give ourselves compassion during difficult relationship interactions, therefore, we start to feel calm and cared for, meaning that our relationship partners start to feel calm and cared for as well. This contributes to an upward spiral of positive interactions, transforming anger and mistrust into kindness and acceptance.

Hard feelings like bitterness and anger often have an innocent “unmet need” behind them[7], [31]. For example, we all wish to “live favorably in the minds of others”¹⁰. MSC participants are asked to think of a relationship in which they were hurt and then to strip away the anger and resentment and discover the unmet need behind the anger. We often wish to be “seen”, “appreciated”, “admired”, “comforted”, “loved” or to feel “less scared”, “less confused” or “less lonely.” A lovely poem by Hafiz, *With the Moon Language*[32] illustrates this point:

Admit something:

Everyone you see, you say to them, "Love me".

Of course you do not do this out loud, otherwise someone would call the cops.

Still, though, think about this, this great pull in us to connect.

Why not become the one who lives with a full moon in each eye

that is always saying,

with that sweet moon language,

what every other eye in this world is dying to hear?

When we make contact with the soft feeling behind the hard feeling, and meet the unmet need directly by our own kindness and appreciation, it's much easier to release anger and resentment.

Participants are invited to do a reflection exercise called Forgiveness of Self and Forgiveness of Others. The main point of forgiveness practice is to safely open to the pain and suffering we've experienced in a relationship before we can forgive. Self-compassion allows us to open to this hurt. The following exercise is an example of forgiveness practice:

Forgiveness of Self

- Bring to mind a person whom you have hurt by your words or deeds; someone whom you think about with a touch of guilt or remorse. Please choose someone who can generate a little distress in your body, but only a little.
- Open your awareness to the distress you feel in your body, mind and heart when this person comes to mind.
- Recognize that it's only human to make mistakes, and try to understand some factors leading to your mistake. Perhaps this person didn't bring out the best in you, and you know it.
- Offer forgiveness to yourself, perhaps by saying the phrase: *"May I (begin) to forgive myself for what I have done, wittingly or unwittingly, to have caused [this person] harm."*
- Set the intention not to repeat the same mistake, even if it might happen again.

The following session is the last session of the MSC program, so the home practice assignment of session 7 is to review all the meditations and informal practices learned so far and identify "What Works for Me?" Special attention should be given to those practices that were most enjoyable since they'll be the easiest to practice once the program has ended.

Session 8: Embracing Your Life

The opening discussion of session 8 is an exploration of how to maintain a regular practice of mindful self-compassion after the program ends. Group members are encouraged to share what has worked for them in the past, and what might support a regular practice going forward. Suggestions include:





- Pick a consistent time to practice every day
- Let your meditation be like play
- Make your *life* your practice
- Practice the 3-minute rule – just *start* and see what happens
- Find a meditation teacher
- Join a meditation group
- Go on a retreat
- Read inspiring books

Some participants are confused by the broad range of techniques they've learned and wonder how they should practice formal sitting meditation. Each meditator is encouraged to be his or her own teacher and ask during meditation, "What do I need now?" "What's calling me?" For example:

- Do I need to calm and stabilize my attention with more breath awareness?
- Do I need to loosen my grip on the breath by feeling *all* body sensations or listening to sound?
- Do I need to warm up my meditation with loving-kindness and compassion?

The main topic of this final session of the MSC program is "embracing your life", ending the program on a positive note. As Rick Hanson[33] says, "we're like Velcro for bad experiences but Teflon for positive ones". That's because our default mode network is focused on ensuring our survival by identifying and resolving problems, but if we wish to be happy, we also need to savor the positive aspects of our lives. An example of a savoring exercise is the Pleasure Walk introduced during the retreat. Negative emotions manage to narrow our attention, which is a useful adaptation to face danger head-on, whereas positive emotions broaden attention and help us to identify unforeseen opportunities[34]. Research on savoring is presented[35] as well as the need for positive intentional activity – what we do, how we think and how engaged we are in our lives – that can substantially raise our happiness level[36].

There are two class exercises in session 8. In the first one, participants are invited to reflect on 2 or 3 personal qualities that they appreciate about themselves, and also to consider the people who helped them develop those special personal qualities. The key is that instead of thinking about what makes them "special and above average", people are encouraged to embrace the shared human experience of special strengths. We all have good qualities as well as weaknesses, and by appreciating our good qualities instead of taking them for granted, we can be kinder, more supportive and encouraging to ourselves – just as we'd be with a good friend.

In the second exercise of session 8, each group member receives a piece of bittersweet chocolate (60%-70% cocoa) and is invited to take three bites, tasting the bitterness, the sweetness and then the combination of bitterness and sweetness. The symbolic message is that bad and good, bitter and sweet, always come together. Our process of perception works by contrasts: we know dark because we see light; we know a rock is hard because our toe is soft. Therefore, to live fully in our own skin, we need to embrace *all* aspects of ourselves with mindful, compassionate awareness. We're only living half of our lives, and missing many opportunities to learn, if we skip the

unpleasant side of life. Besides, perfection would be boring!

At the end of the MSC program, each participant is invited to share something learned in the course that he or she would like to take home and apply in daily life. Then we conclude with a brief meditation:

May we be open to suffering, with wisdom and compassion.

May we accept ourselves and others, just as we are.

May all beings live in peace.

May all beings be free.

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Box II

Cultivating Emotional Balance: Structure, Research, and Implementation

Eve
Ekman



Paul
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Cultivating Emotional Balance: Structure, Research, and Implementation

Introduction

Cultivating Emotional Balance is a 42-hour, secular, emotion and mindfulness skills training designed to help participants improve emotional life by cultivating constructive emotional experiences, decreasing destructive emotional experiences and developing mental balance. The training consists of overarching conceptual knowledge and experiential exercises drawn from Western scientific research on emotions and traditional Eastern attention focus (*Shamatha*) and contemplative (Four Immeasurables) practices.

CEB is designed to provide useful skills for individual development and interpersonal communication across non-clinical populations. CEB encourages participants to set their aspirations for exceptional mental health (genuine happiness) through attentional, emotional, cognitive and conative balances.

CEB Creates Choices

- Whether to engage emotionally.
- If you do engage, to have a choice over how to engage.
- Have your emotions work for you not against you.
- Have your experience of emotions be constructive not destructive.
- Identify the root causes of suffering and move towards genuine happiness.

CEB Skills

- Understanding how emotions work.
- Recognizing your hot triggers and their scripts.
- Developing stable attention and relaxation.
- Developing awareness for self monitoring capabilities for:
 - o Emotions arising in the self.
 - o Impulses that arise to engage you emotionally.
 - o When you are in the grip of an emotion.
 - o Emotions arising in others.
 - o Desires and intentions.
 - o The quality of attention and mindfulness.
 - o Activities and behaviors that foster and/or prevent genuine happiness.



CEBTT participants 2001 and 2012 Thayapura, Thailand.

Background

Cultivating Emotional Balance (CEB) is a training program that emerged during a Mind & Life dialog between behavioral scientists, a neuroscientist, a monk, a philosopher and the Dalai Lama in 2000. The 2000 meeting in Dharamsala featured many Western experts in different fields of science who spent a week in dialog with the Dalai Lama on “Destructive Emotions”. Paul Ekman, world-renowned emotion researcher and professor emeritus at UCSF, presented an evolutionary view of emotion, in which he maintained that emotions are not inherently destructive, for if they were they would not have been preserved over the course of evolution (www.paulekman.com).

On the fourth day of the meeting, looking directly at Ekman, the Dalai Lama asked if this was just going to be talk, or whether something was going to happen to improve the emotional lives of people around the world. Ekman took up the challenge and said he thought an innovative training program could be developed combining Western exercises to develop more skillful emotional behavior, with Eastern meditative practices. The Dalai Lama was enthusiastic, requesting that the meditative practices should be secular in nature, and Alan Wallace was approached to be the lead for incorporating meditative practices. He is a contemplative scholar and a prolific writer who spent fourteen years as a Tibetan Buddhist monk, ordained by H. H. the Dalai Lama, and runs the Santa Barbara Institute for Insight Studies.



CEBTT participants 2001 and 2012 Thayapura, Thailand.

Over the course of the next day, Ekman, Alan Wallace and scientists Mark Greenberg and Richard Davidson began to sketch out what such a training program would comprise and how its impact could be best evaluated. The name of the program, Cultivating Emotional Balance, was generated in that first day of discussion. Ekman and Wallace continued the planning of CEB with consultation from the original Mind & Life group on training program design and research design to capture the effects of the CEB training. The Dalai Lama gave the first \$50,000 and an additional \$800,000 was raised with help from Jon Kabat-Zinn, Dan Goleman and the Fetzer Institute to perform a thorough research trial of CEB. Paul Ekman attended the pilot study for CEB and he recruited Margaret Kemeny with expertise in clinical trials research projects to run the research. Margaret Cullen and Alan Wallace provided the training. Details on the findings from the original research study will follow at the end of the paper.



CEBTT participants 2001 and 2012 Thayapura, Thailand.

Purpose

CEB is especially appropriate for the rising number of individuals working in high-stress occupations. In the preliminary clinical research trial, police officers and school teachers were considered, but teachers were chosen in the hope that the benefits they received would be experienced by their students. CEB can create pathways to compassion via the ability to recognize the suffering of others and tolerate this distress more effectively. CEB is not explicitly compassion training, however learning how to meaningfully attend to the emotional experiences between the self and others coupled with attention focused meditation (Shamatha practices, see [Box 7](#) in this volume) and practices of loving kindness, empathetic joy, compassion and equanimity (Four Immeasurables, see [chapter 8](#) in this volume) fosters compassion and constructive interpersonal communication.

From Western psychology, “Emotional skills” is the novel focus of CEB[1]. Emotional skills help people to better understand their emotional life, and thereby increase constructive and decrease destructive emotional engagements. The contemplative practice, while keeping to the Dalai Lama’s request for CEB to be secular, emphasizes the development of genuine happiness through connection to core aspirations. Genuine happiness focuses upon enhancing eudaemonic endeavors that further stable, non-stimulus-driven happiness versus a predominant focus upon hedonic, sensual and transitory pleasure. Eudaemonia is an Aristotelian term that describes the contentment that arises from what we bring to, not take from, the world and creates true human flourishing. Wallace’s four balances, as described following this section, instruct the cultivation of genuine happiness and mental well-being through conative, attentional, cognitive and emotional balance[2].

Course Outline

This next table provides a suggested schedule of how to teach CEB in 2.5 and 8-hour blocks over eight sessions. The table is divided up into emotional skills and contemplative skills components. CEB is intentionally constructed for the emotional and contemplative skill sets to be taught in parallel but not an integrated format. The skill sets are complimentary as they build over the course of the training. Learning the conceptual knowledge about emotion evolves into emotional awareness through physiological experience of how emotions feel, which is then advanced through close examination of strong emotional triggers. The contemplative practice begins with developing an aspiration and practicing stability of attention (*Shamatha Meditation Practice*) to create a solid foundation of relaxation and clarity, which are closely followed by practices of loving-kindness, compassion, empathetic joy and equanimity, which can help moderate moods and appraisals of the surrounding environment. Emotional skills are enhanced by the mindful space and stability of attention arising from contemplative skills; additionally, the aspiration to achieve genuine happiness provides an anchor point throughout the entire training.

The first three sessions develop the conceptual framework of emotion. This begins with lectures on the universal expressions, domains, characteristics, families and themes and functions of emotions. Next is an in-depth description of the timeline of an emotional episode, including stages of appraisal and reaction. The last four sections of the course are used to experientially delve into the seven universal expressions of emotion via exercises to familiarize participants with the felt physiology of emotion. The contemplative skills also scale over the course, beginning with stability of attention and developing the philosophy alongside experiential practices.

SESSION ONE (2.5 HOURS)

| Emotional Skills Training: | Contemplative Skills Training: |
|----------------------------|--|
| LECTURE: Emotional Domains | LECTURE: Introduction to Shamatha Practice and Definitions of Mindfulness PRACTICE: Shamatha: Full Body PRACTICE: Loving -Kindness |

SESSION TWO (8 HOURS)

| Emotional Skills Training: | Contemplative Skills Training: |
|---|--|
| LECTURE: Functions of Emotions Key Characteristics of Emotions Emotion Families and Themes Triggers Emotion Alert Database Automatic Appraisal Affect Program Refractory Period | PRACTICE: Shamatha: Belly + Discussion/Homework Silent lunch/mindful eating LECTURE: Pursuit of a Meaningful Life: Happiness, Truth & Virtue LECTURE: Meaning of Meditation PRACTICE: Shamatha: Nostrils |

SESSION THREE (2.5 HOURS)

| Emotional Skills Training: | Contemplative Skills Training: |
|--|---|
| LECTURE: Timeline for Emotional Episode Moderating/Eliminating Triggers Moderating/Eliminating Emotional Behaviors | PRACTICE: Shamatha: Nostrils + Discussion/Homework LECTURE: Nature and Significance of ATTENTION |

SESSION FOUR (8 HOURS)

| Emotional Skills Training: | Contemplative Skills Training: |
|--|---|
| LECTURE: Review Anger PRACTICE: Anger Memory and Facial Exercises LECTURE: Loss of Control, More on Anger, Resentment and Hatred | PRACTICE: Shamatha: Nostrils + Discussion/Homework LECTURE: Settling the Mind in its Natural State PRACTICE: Settling the Mind in Its Natural State LECTURE: Loving-Kindness PRACTICE: Loving-Kindness Mid-Program Evaluation |

SESSION FIVE (2.5 HOURS)

| Emotional Skills Training: | Contemplative Skills Training: |
|---|--|
| LECTURE & PRACTICE: Disgust, Contempt Memory and Facial Exercises Respectful Disagreement Exercise | PRACTICE: Shamatha: Full Body, Belly, Nostrils, Settling the Mind + Discussion/Homework PRACTICE: Loving-Kindness (Short) |

SESSION SIX (8 HOURS)

| Emotional Skills Training: | Contemplative Skills Training: |
|---|--|
| LECTURE & PRACTICE: Fear Memory and Facial Exercises Surprise Memory and Facial Exercises Sadness Memory and Facial Exercises | PRACTICE: Shamatha – class choice of level and whether guided or unguided + Discussion/Homework LECTURE: Mental Afflictions and the 4 Applications of Mindfulness PRACTICE: 5 Elements of Sensory Experience PRACTICE: Body Scan LECTURE and PRACTICE: Mindfulness of Feelings |

SESSION SEVEN (2.5 HOURS)

| Emotional Skills Training: | Contemplative Skills Training: |
|---|--|
| LECTURE & PRACTICE: Enjoyment Memory and Facial Exercises and Duchenne Smile Exercise | PRACTICE: Shamatha: Mind in Natural State leading to Mindfulness of Mental Events OR Shamatha – any level + Discussion/Homework. LECTURE: On Compassion: “Imagination and the Heart” PRACTICE: On Compassion |

SESSION EIGHT (8 HOURS)

| Emotional Skills Training: | Contemplative Skills Training: |
|---|---|
| LECTURE & PRACTICE: Emotional Profiles Respectful Disagreement Practice Role Play Exercises | PRACTICE: Shamatha: Mind in Natural State leading to Mindfulness of Mental Events OR Shamatha – any level + Discussion/Homework. LECTURE: Empathetic Joy PRACTICE: Empathetic Joy LECTURE and PRACTICE: Equanimity LECTURE: Overview of Four Immeasurables REVIEW: Pursuit of Genuine Happiness PRACTICE: Loving-Kindness Complete PANAS, FFMQ, Course Evaluation |

Timeline of an Emotional Episode

This next section provides an excerpt from the manual covering the conceptual development of emotion through the timeline of an emotional episode. First, an overview of the seven universal expressions of emotion provides the overall vocabulary for emotion families, themes and triggers[3], [4].

The Big 7: Universal Emotions

The major focus is on the Big 7 Universal Emotions (happiness, sadness, anger, fear, disgust, contempt, surprise) because we know most about them and they are the key elements in moods, traits and disorders[3]. In order to create the emotional choice we are seeking through this training, it makes sense to focus on the emotions we can learn to identify in others and ourselves. Developing the conceptual understanding of emotions as distinct from moods, states and disorders is a critical component of developing a working emotional vocabulary.

| EMOTION | MOOD | TRAIT/DISPOSITION | DISORDER |
|-----------|------------------|-------------------|---|
| Anger | Irritable | Grumpy/hostile | Violent |
| Fear | Anxious | Timid | Panic, anxiety disorder |
| Sadness | Blue/melancholic | Pessimistic | Depression |
| Disgust | no name for it | Snobbish | Obsessive/compulsive, phobias, anorexia |
| Contempt | no name for it | Haughty | Narcissism? |
| Surprise | | Candid/naïve | Dementia |
| Happiness | Bliss/joy | Optimist/cheerful | Mania |

Cultivating Emotional Balance

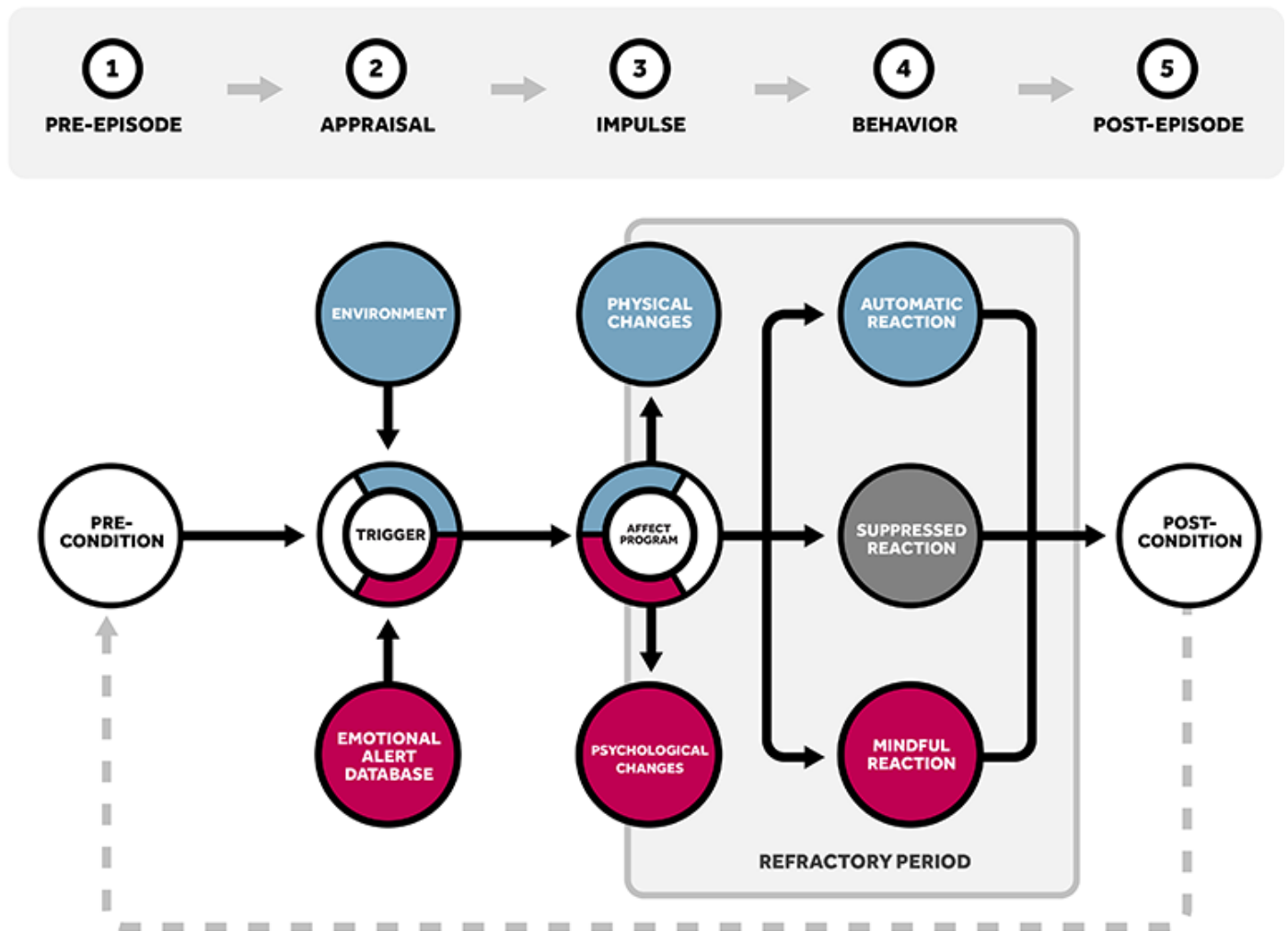
We can think of these seven emotions as families that all have common or related triggers. Each family has a certain theme and variations on that theme, related to our ancestral genetic history. Here is the list of the seven universals with their evolutionary purpose:

| | |
|------------|---|
| Anger: | Fight, remove obstacle |
| Fear: | Flight, escape from threat |
| Sadness: | Be reassured, elicit connection and caring from others, create connection in the face of loss |
| Happiness: | Deepen connection and cooperation |
| Disgust: | Get rid of something poisonous or harmful |
| Surprise: | Focus attention to identify something unexpected |
| Contempt: | Assert superiority |

The Timeline

This next section describes how all seven emotions unfold from our natural state of automatically appraising our environment. In this diagram we see that the trigger to emotion has a back-story, our automatic appraisals of the environment are constantly processing the world around us, through our senses, people, places and situations. The appraisal of our environment is run through our mind, which holds our personal database of memories, themes and scripts that have been genetically passed down as well as accumulated over the years. When the appraisal of our environment matches something in our database the trigger begins. The database is called the “emotion alert database”; this is unique to the experiences of each person’s life.

The physiological response begins with the trigger and can create a refractory period where we see the world through the lens of the emotion. Our reactions and behaviors are often performed through the lens of the refractory period and without the ability to take in new information. The timeline of the emotion is both conceptual as well as a tool to examine our own emotional experiences. Below you will see the image of an emotional timeline and the descriptive text to explain the terms used.



Emotional Episode Timeline. Design by Eve Ekman & Joe Flumerfelt

1. **Automatic Appraisal:** the constant and subjective appraisal of the environment seen through the lens of our individual mind.
2. **Environment:** the physical context including places, people and other sensual input as well as thoughts or memories.
3. **Emotion Alert Database:** where universal/hardwired responses and acquired memories create the scripts behind all of our triggers. For example, from the environment we get a smell and in the emotion alert database is the stored memory of the shampoo our mother used in our childhood and we are triggered to experience an emotion of warm nostalgia of a happy childhood.
4. **Triggers:** the initiator of the physiological emotion response. Can be universal (sudden loss of ground under the feet creating fear) or learned (the smell of a certain shampoo). They are created from the combination of the automatic appraisal of the environment matching to some universal/hardwired or acquired script in the emotion alert database. When the trigger resembles something in the emotion alert database, it may be a highly accurate or distorted perception of the triggering event.
5. **Activation of relevant affect program:** each emotion has a separate program. This occurs also in milliseconds. The affect program contains instructions for facial, vocal and postural signals, preset changes in physiology to support preset actions, learned changes in physiology to support learned actions – physical actions, words, memories, images. The instructions in an affect program generate impulses in milliseconds.
6. **Learned display rules** (to regulate the signals) and **learned feeling rules** (to modify, amplify

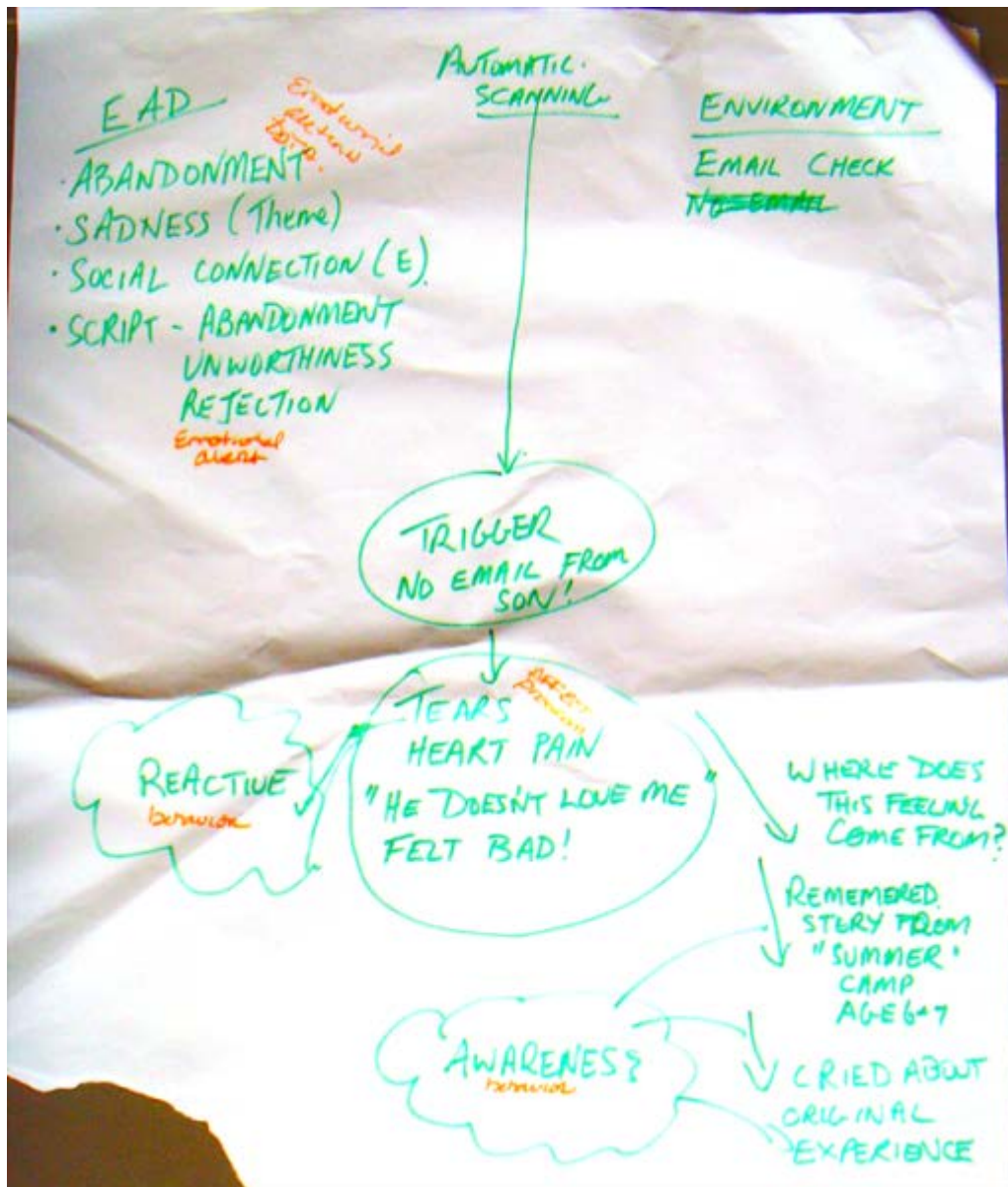
or suppress the subjective feelings) arise. We don't know how quickly these occur. Do they occur before signals and actions, or immediately during the onset of signals and actions? Impulses are translated into actions and signals.

7. **Refractory Period** is initiated with the onset of actions and signals – perception is narrowed and distorted, filtering and interpreting information relevant to and consistent with the prevailing emotion. For example, when fear is aroused, there is a heightened sensitivity to real and imagined threats.

8. **The gap between impulses** (Step 2) and action/signals (Step 4) is variable, depending on:

- The individual characteristics of each person, the person's emotional profile.
- The intensity of the appraised trigger.
- The momentary psychological state of the individual when the trigger is appraised (how much sleep the person had last night; what, if any, emotion the person last experienced or is currently experiencing, etc.).

The image below is from a participant who developed an example of the timeline with her group for an emotional episode she had earlier that week. She was encouraged to find an episode in which she felt her emotional experience was exaggerated. Her emotion was great sadness, she felt this emotion when not receiving an e-mail response from her son. She traced this sadness back to a feeling of being forgotten, which exists in her emotion alert database from her parents being out of touch with her while she was away during the summers over thirty years prior. She recognized that her refractory period prevented her from seeing the reality of the situation as it was, that her son was simply busy and not avoiding or abandoning her.



Contemplative Skills

Shamatha & Obsessive Compulsive Delusional Disorder, OCDD

The next section describes the conceptual framework of contemplative skills in CEB. The conceptual understanding of emotions and the emotional timeline are skills that require space to practice and act; this space is developed and fostered via the contemplative skills. The contemplative framework also develops an intention for practice by explaining the goal of genuine happiness and exceptional mental health. The obstacle to exceptional mental health can arise from the inability to see reality as it is and being caught in ruminations and persistent worry. We are constantly talking to ourselves, sometimes in an almost compulsive fashion without us being able to stop it. We can get caught up in our thoughts and assessments as though they represent the true nature of reality. When the thinking process is obsessive (all the time and out of our control), compulsive (we get caught up in it) and out of touch with reality (delusional, not accurate) we need to learn techniques to change our way of thinking[5] – [7].

Shamatha (or focused attention training) is designed to provide the kind of stable attention that is conducive to all kinds of mindfulness practice. (For more information and research on *Shamatha* see <http://www.shamatha.org>) There are five *Shamatha* practices taught by Wallace. The first three are mindfulness of breath practices, and the last two are more advanced practices using either the space of the mind or awareness itself as the focus of attention. The mindfulness of breath

practices help with cultivating the three qualities we will need to develop attentional balance – relaxation, stability and vividness (or clarity).

Four Balances

This next section provides an overview of the conceptual base for the contemplative side of the course. This is also adapted from the CEB manual as well as an article written by Alan Wallace and Western research psychologist Shauna Shapiro, which proposes both Eastern and Western points of view as well as empirical questions on mental balance achieved via conative, attentional, cognitive and emotional balances[8].

Conative Balance

The first balance that provides the wholesome motivation to achieve the other balances instead of apathy. Conative balance also fosters the aspiration, motivation and intentional goals to propel the practices.

Attentional Balance

The mindfulness of breath practices to develop relaxation, stability and vividness and avoid hyperactivity or laxity of attention. This is also associated with the *Flow* state of absorbed attention[9].

Cognitive Balance

Cognitive balance means engaging with the world without conceptual assumptions and the ability to develop moment-to-moment awareness to see reality as it is. Achieving Cognitive balance entails developing awareness and insight to combat Obsessive Compulsive Delusional Disorder

Emotional Balance

Emotional balance is the regulation of emotions to decrease destructive emotional episodes and increase constructive emotional engagements. A destructive emotional episode is harmful to self and/or others, whereas a constructive one promotes understanding, connection and human flourishing.

Four Immeasurables

Values are central to CEB. These four heart values or practices of loving-kindness, compassion, sympathetic joy and equanimity (see [chapter 8](#) in this volume) provide a basis for the arising of prosocial behavior, that is, caring about the welfare and rights of others, feeling concern and empathy for them, and acting in ways that are beneficial. Evidence suggests that prosociality is central to the well-being of social groups across a range of scales.

Science is not value free, truth and values are always intertwined. Central to the curriculum of CEB is the promotion of a set of values about the importance and worth of well-being, flourishing and a meaningful life (*eudaemonia*).

These four heart values are broad and all-encompassing. They are not confined to the care for specific others but are instead generalized to include strangers and so-called enemies. These heart values are not about positive thinking, which so often becomes superficial and unrealistic, but

about *eudaemonia*.

1. *Loving-Kindness (Metta)*

The definition of loving-kindness is the heartfelt yearning that oneself and others might find happiness and the causes of happiness. There is a tendency to conflate the desire for happiness for others with self-centered attachment, where the other is an object for personal gratification. One can enter into a self-centered relationship even with oneself, in the case of self-blame or self-infatuation.

The test for discovering where we are on the attachment loving-kindness continuum is: when a loved one behaves badly do we love him/her more or less?

- The illusory facsimile of loving-kindness is attachment (near enemy)
- The opposite is hatred (far enemy)
- The cause is seeing that others are just like ourselves in wanting to be happy
- Loving-kindness fails when it produces selfish affection
- Loving-kindness succeeds when it makes animosity subside

2. *Compassion (Karuna)*

This is the wish, the aspiration that others don't suffer and don't create causes for suffering. It also includes the readiness and willingness to help relieve and diminish both. In the practice of compassion we are cultivating altruism as a deeply ingrained framework that predisposes us to act to help others. This is highly correlated with happiness and emotional balance (Wallace & Shapiro, 2006). Heroes often say "I had no choice" after an act of selfless altruism. This kind of fundamental framework or attitude is crucial in being able to resist the compelling nature of difficult emotions.

- The illusory facsimile of compassion is grief (near enemy)
- The opposite is cruelty (far enemy)
- The cause of compassion is recognizing and caring about the pain of those overwhelmed by suffering
- Compassion fails when it produces depression and helplessness
- Compassion succeeds when it makes cruelty subside

3. *Sympathetic Joy (Mudita)*

Sympathetic joy is the state of rejoicing in seeing others experience good fortune. It is a heartfelt and uplifting sense of joy at the presence of virtue and goodness in the world.

- The illusory facsimile of sympathetic joy is frivolous cheerfulness (the near enemy is the Pollyanna syndrome, a superficial kind of positive thinking)
- The opposite is envy & cynicism (far enemy)
- The cause is seeing others flourish and recognizing their happiness

- *Mudita* fails when it produces superficial frivolity
- *Mudita* succeeds when there is an uplifting appreciation of the worth and value of others' good fortune

There is a crucial difference between rejoicing in one's own virtues and a more grasping form of self-congratulation ("aren't I good"). This parallels the difference between remorse and guilt. Meditating on *mudita* is a valuable and effective practice for neutralizing low self-esteem, envy, depression and cynicism[5], [6]. Just as remorse counteracts the potency of a regrettable act, so rejoicing enhances the potency of a worthy act.

4. *Equanimity (Upekha)*

Seeing the transience and changeability of human relations arouses equanimity. Within equanimity there is balance and groundedness, and a sense of transcendence through present moment awareness.

- The illusory facsimile is the equanimity of ignorance or indifference (near enemy)
- The opposite is attachment and aversion (far enemy)
- The cause of equanimity is seeing the arbitrary nature and changeability of human relations
- *Upekha* fails when it produces the equanimity of ignorance, which is indifference
- *Upekha* succeeds when self-centered attachment and aversion for others subsides

Cultivating Emotional Balance Teacher Training at Thanyapura

June 2010 was the first Cultivating Emotional Balance Teacher Training, CEBTT, which took place in Phuket, Thailand, at the newly constructed Thanyapura Mind Centre. CEBTT is taught in a highly experiential format over the course of five weeks. The training is divided into two sections, two weeks of intensive emotional skills teacher training, designed by Paul Ekman and taught by Eve Ekman, and three weeks of silent meditation covering practices of *Shamatha*, settling the mind in its natural state and the four immeasurables, led by Alan Wallace.

In the last three years a total of one hundred and fifty participants from over twenty countries have attended. Eve Ekman has been training emotional skills while working towards her Ph.D. in public health and psychology research in the School of Social Welfare at Berkeley; she has also been a medical social worker in the San Francisco General Hospital Emergency Room since 2006.

The first two weeks focus upon ideas outlined in Paul Ekman's 2003 "Emotions Revealed" and is taught in didactic, Socratic and experiential formats to encourage discussion, self-discovery and the practice of emotional skills. CEB is not explicitly "compassion" training, however the skills of emotional balance and contemplative teachings of the Four Immeasurables, namely compassion, empathetic joy, equanimity and loving-kindness, provide rich materials to develop a deep emotional awareness, which implicitly includes the practice of compassion.

The first class had the opportunity to see training in the making and was deeply influential in the development of the pedagogy and manual. Following the 2010 CEBTT, Alan Wallace, Paul and Eve Ekman developed a manual to teach CEB for the CEBTT participants. Instructive handouts

and edits for ease of flow were developed by a handful of dedicated certified 2010 CEB teachers, Thupken Leshke, Peta McAuley and Elizabeth Campbell. In 2011 Malcolm Huxter, a clinical psychologist and Dharma teacher from Australia, led meditation in the first two weeks; in 2012 Andrea Capellari, an experienced meditation teacher and former monk, led the meditation session during the first two weeks. These graduating classes have taken the CEB training back home across the world and have been teaching it to schoolteachers, lawyers, clinicians and various other populations in Brazil, Australia, Mexico City, Hong Kong, Barcelona and the United States.

This five-week training provides participants with certification as a CEB trainer. Because CEBTT has been developed from the CEB clinical research trial, the certificate for training requires all participants to use the prescribed CEB format to achieve the study's positive outcomes. Studies to replicate the CEB program in shorter format and with different populations have been strongly encouraged and will hopefully be developed over the coming years. The Santa Barbara Institute for Consciousness Studies, SBI, directed by Alan Wallace since 2001, holds the copyright to CEB and houses the planning and administration for CEBTT. SBI is dedicated to interdisciplinary research and education to advance understanding of the nature and potentials of consciousness through research, practice and education. A California CEBTT training is in preliminary planning stages in order to reach local audiences and advance affiliations with research and training institutions of California.

Though SBI is the fiscal and literal home of CEB, Thailand has been the metaphysical and physical home for the last three CEBTT training sessions. Thanyapura Mind Centre is a unique retreat setting deserving of description. The Mind Centre is located outside Phuket town, an elegant retreat tucked among pineapple groves looking up to rainforest-covered mountains. The setting is also home to the Phuket International Academy Day School, which has a K-8 international baccalaureate program site and an international sports training facility. The physical and educational facilities are incorporating mindfulness practices into their programs, including compassion education for students.

<http://www.thanyapura.com/>

<http://www.thanyapura.com/piads/phuket-international-academy-day-school/>

Future Directions

The future directions of CEBTT and CEB are in a rich period of being explored. As mentioned earlier in this section, there exists a great deal of interest in creating research opportunities to pilot the effectiveness of CEB with different populations, especially children, as well as a pilot CEB program in shorter formats. CEB is eager to broaden the populations who are learning and teaching CEB, in the United States and Internationally.

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Box III

Cognitively-Based Compassion Training (CBCT) – Protocol and Key Concepts

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Cognitively-Based Compassion Training (CBCT)

– Protocol and Key Concepts

Cognitively-Based Compassion Training (CBCT) began as an interdisciplinary pilot project in 2005 to test the psychological and physiological effects of compassion meditation in college undergraduates, an idea that originally stemmed from an Emory University undergraduate, Molly Harrington, who had a concern for students' mental health and the rising number of undergraduate suicides. Charles L. Raison, M.D., acted as the principal scientific investigator and Geshe Lobsang Tenzin Negi, Ph.D., as the principal contemplative investigator. As a basis for this research, Dr. Negi developed the CBCT protocol, drawing from the Tibetan Buddhist traditions of *lojong* (mind training) and *lamrim* (the stages of the path for spiritual development), but establishing it as a secular practice for general use. Research with undergraduates continued for five semesters and eventually led to an NIH grant to explore the effects of compassion training among adults[1]. It also led to a number of other research projects involving CBCT with adolescents in foster care[2], elementary school children[3] (see [chapter 1](#) in this volume), individuals who had attempted suicide, victims of trauma, and others. A teacher training program has since been developed due to the demand for CBCT programs, both for research and outreach.

CBCT was designed with the intention of developing a secular meditation protocol that recognized the strengths of existing meditation programs while building on them in a few distinct ways. At the time, the majority of secular meditation programs did not primarily focus on analytical meditation and did not draw from the rich *lojong* tradition. In the *lojong* tradition, compassion meditation practice requires practitioners to actively work with their emotions in order to develop a deep feeling of affection for others and a strong positive connection with others, employing both non-analytical and analytical (or cognitively-based) styles of meditation. In the Tibetan Buddhist tradition, compassion practice is considered to confer immeasurable benefits to the individual and to society.

CBCT recognizes that all human beings have an innate capacity for compassion, a result of our evolutionary heritage as mammals, which require maternal care in order to survive (see [chapter 7](#) in this volume). Nevertheless, it takes active cultivation to bring this level of innate compassion to the state of genuine altruism. The Tibetan *lojong* tradition, a system of “mind training”, seeks to bring about this transformation through cognitive, analytical techniques that, when practiced sincerely, will enable an individual to reframe relationships with others. The degree to which a person is able to transform relationships through this process is dependent on the degree to which that person is able to relate to others with affection, which engenders deep feelings of endearment and tenderness towards others. We are using affection to translate the Tibetan word *yid-'ong*, which conveys the sense of someone who is cherished and pleasing to the mind, such as the immensely pleasing way a baby appears to its parents. Affection is the catalyst that activates empathy to spark the development of compassion. Developing a sense of affection is thus crucial to the process, and the tradition presents guided steps for its successful cultivation. Different approaches for cultivating affection are described in various lineages of the Tibetan Buddhist tradition, each lineage providing robust pedagogical and experiential training tools. Dr. Negi chose the materials for the protocol from the lineages that would be appropriate for a secular research context. Since some strands of reasoning for developing compassion rely heavily on the Buddhist philosophical doctrine of reincarnation, they were not incorporated. Our use of the term “secular” should not be understood as implying a rejection or exclusion of religion. Rather, it aligns with the





usage employed by His Holiness the Dalai Lama to connote respect to all religious traditions[4]. We believe CBCT speaks to universal themes inherent in all major religious and humanistic traditions while remaining faithful to the empirical and experiential spirit of Tibetan Buddhism.

The protocol as outlined here has been revised to incorporate feedback from participants and lessons we have learned from teaching it over the past seven years. It now forms the basis for our ongoing research, as well as for several clinical interventions that are being implemented by our team among various populations in Atlanta. A full manual of CBCT is available for instructors, which elaborates on each of the eight main topics of CBCT and provides examples of teaching exercises and guided meditations.

In the remainder of this chapter, we will address the question of what compassion is and why we need it; whether compassion can be trained; and what “cognitively-based” or “analytical” meditation means. We will then look at the key ingredients in the cultivation of compassion that form the backbone of CBCT: cultivating endearment and impartiality, self-compassion (see [chapter 16](#) in this volume), and insight and mindfulness (see [chapter 11](#) in this volume). The last section lists sequentially the eight topics of a CBCT course, which are an elaboration of these key ingredients, in the order in which they would be taught.

What is Compassion and Why Do We Need It?

At its most fundamental level, compassion is the wish to alleviate the suffering of another.

Compassion is a basic human value, necessary for our survival as individuals and as communities. It is recognized by all major spiritual traditions, and is indeed elevated as a highest ideal by them. Modern science is also increasingly recognizing the importance of compassion for our health and the flourishing of our species. Charles Darwin, who is more frequently (not necessarily correctly) associated with ideas like “survival of the fittest”, in reality described sympathy as the strongest of human instincts, essential for our survival, and the foundation of our ethical systems. More recently, psychologist and primatologist Frans de Waal has made the case that the roots of compassion lie far back in our evolutionary history, at least as far back as the last common ancestor of birds and mammals, and has chronicled numerous acts of kindness and moral behavior among non-human primates[5].

If we understand love as the wish for another to have happiness, then we see that compassion and love are two sides of the same coin. When we feel close to others, we want them to have happiness and to be free from suffering: that is love and compassion.

Can Compassion be Trained?

The innate biologically-based compassion that we share with other mammals is the basis for the cultivation of compassion, but without such cultivation it remains limited and only extends to those close to us. As human beings, however, we can extend compassion to embrace larger groups. This second level of compassion is compassion as a deliberately trainable skill. Such compassion will only arise if there is a sense of endearment towards others. If that sense of endearment can be cultivated towards larger sections of humanity, so can compassion.

The actual conditions of our existence are such that we exist interdependently with others (see [chapter 7](#) in this volume). Everything we need for our survival comes from the efforts of countless others, almost all of whom are personally unknown to us. Recognizing this often-neglected fact enables us to feel endearment and gratitude towards others. Such a recognition needs to be

deepened through training and practice, otherwise it remains only a superficial thought. When it does become a deep realization, it changes the way we behave and relate towards others.

This model – that a change in our view will change our behavior once it becomes deeply engrained through training and practice – is called *lta-spyod-sgom-gsum* in Tibetan (pronounced “ta cho gom soom”), which literally means “view, behavior and meditation”. Spiritual traditions across the world acknowledge that a compassion that embraces others beyond one’s immediate friends and family can indeed be cultivated, but that it does not come easy. Deep thinkers in the sciences, such as Albert Einstein and Charles Darwin, have come to the same conclusion. Darwin wrote in *The Descent of Man*, “As man advances in civilization, and small tribes are united into larger communities, the simplest reason would tell each individual that he ought to extend his social instincts and sympathies to all the members of the same nation, though personally unknown to him. This point being once reached, there is only an artificial barrier to prevent his sympathies extending to the men of all nations and races. If, indeed, such men are separated from him by great differences in appearance or habits, experience unfortunately shows us how long it is before we look at them as our fellow-creatures. Sympathy beyond the confines of man, that is, humanity to the lower animals, seems to be one of the latest moral acquisitions... This virtue, one of the noblest with which man is endowed, seems to arise incidentally from our sympathies becoming more tender and more widely diffused, until they are extended to all sentient beings. As soon as this virtue is honored and practiced by some few men, it spreads through instruction and example to the young, and eventually through public opinion.”[6] This remarkable passage shows that Darwin considered sympathy (the term he used for what we are calling compassion) a social instinct that was inborn but that could be extended through cultivation and culture, even to the point of being extended towards all sentient beings. Even more striking, he considered that such an extension of our compassion could be taught to children and extended throughout society. Such a view resonates with the vision of His Holiness the Dalai Lama to spread the cultivation of compassion throughout society through education and research.

In a similar vein, Einstein wrote in a private letter, “A human being is part of the whole called by us universe, a part limited in time and space. We experience ourselves, our thoughts and feelings, as something separate from the rest. A kind of optical delusion of consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest to us. Our task must be to free ourselves from the prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty. The true value of a human being is determined by the measure and the sense in which they have obtained liberation from the self. We shall require a substantially new manner of thinking if humanity is to survive.”[7]

Lastly, His Holiness the Dalai Lama, in his book *Ethics for the New Millennium*, writes, “My call for a spiritual revolution is thus not a call for a religious revolution. Nor is it a reference to a way of life that is somehow otherworldly, still less to something magical or mysterious. Rather it is a call for a radical reorientation away from habitual preoccupation with the self. It is a call to turn toward the wider community of beings with whom we are connected, and for conduct which recognizes others’ interests alongside our own.”[8]

Our most current understanding of the brain is that its structure and function can be changed through experience and training, a phenomenon called neuroplasticity (see [chapter 10](#) and [15](#) in this volume). If we already have a biological basis for compassion, there is every reason to believe that through training and practice this compassion can be extended, even on a neurological level. In today’s world, we can draw from both the insights of the world’s spiritual traditions as well as the findings of contemporary science to understand compassion and how it can be expanded for our individual and collective benefit. Taking the biologically-given limited capacity for compassion that





we already have and expanding it through deliberate training is the focus and purpose of cognitively-based compassion training. It may seem that cultivating unbiased and universal compassion is an impossibility for us, given where we are at the moment. But as human beings we all have the ability to shift our perspectives on things, even if it is slightly at first, and this means that we all have the ability to gradually expand our compassion, even if it begins with baby steps.

The Relevance of “Cognitively-Based” Training

Since at least 2005, His Holiness the Dalai Lama has been encouraging the study of analytical styles of meditation. Analytical meditation is often misunderstood to mean discursive meditation, that is, merely thinking about something. It is better understood as a method for developing insight into something that is being investigated. It involves reflection and close observation of the object of investigation. Just as a lab scientist engages in research by closely observing an object in order to identify what it is and what its characteristics are, so a meditator analyzes an object during analytical meditation. Similarly, just as a physicist comes to understand the nature of subatomic particles through indirect evidence, such as that gleaned from a particle accelerator, so the meditator also employs indirect evidence and reasoning when engaging in analytical meditation to gain insight into his or her feelings, emotions, motivations, relationships and experiences. Relating to a given situation from one perspective – say, a distorted perspective – will give a certain response; seeing the same situation from a different perspective – one that is more in tune with the facts of the situation – elicits a completely different response. In this way, insight is essential to being able to relate to experiences in a more positive way that benefits oneself and others, and prevents one from falling into the same mistakes that result in the same problems.

The point of analytical meditation is to achieve insights or what one could call “a-ha moments”. Such insights are not enough on their own, however; they then need to be deepened. This can happen in one of two ways: analyzing the same topic from additional angles, or “sitting with” the insight once it has been arrived at, that is, remaining focused on the insight in an undistracted manner until it penetrates deeper into one’s being. Put another way, one uses direct and indirect evidence to cultivate an insight into a given topic, event or experience; a measure of success is when it leads to an a-ha moment of conviction. That conviction then needs to become deeply engrained so that it becomes second nature, spontaneous, even unconscious. Here, the post-meditation session, namely when one goes about one’s normal life, is just as important as the formal meditation session.

CBCT employs different strategies to achieve insights. For example, to develop a deeper sense of endearment towards others, one strategy is to cultivate gratitude and appreciation on the basis of recognizing how we rely on others for everything that we need and how our own interests are intertwined with those of others. When employing such strategies, it is important that one’s reflection not remain on a purely intellectual or detached level. Analytical meditation requires that one make it personal. One needs to see for oneself whether certain things are true or not, and one needs to see these truths as deeply connected with one’s own life. Otherwise, what one is doing is not analytical meditation, but merely an intellectual exercise that will fail to have a profound impact on one’s life, behavior and relationships with others.

An affective response like compassion arises on the basis of various factors. The Indian philosopher Dharmakirti once posed the rhetorical question, “What can prevent the result from arising, when all the necessary conditions are complete?” His point was that results come from the presence of their conditions, not just by wishful thinking. We might want to develop more compassion due to seeing its benefits, but that wish alone won’t result in our having more compassion any more than a farmer who wants a rich harvest will get it just by wishing for it. If the

farmer attends carefully to the conditions necessary for a rich harvest – good soil, the removal of weeds, proper moisture, the seeds and so on – a good harvest will be the outcome. Similarly, cultivating compassion requires that we ensure the proper conditions that give rise to compassion.

The Eight Stages of CBCT

The steps of the practice can be briefly outlined as follows:

1. **Developing Attention and Stability of Mind:** The foundation for the practice is the cultivation of a basic degree of refined attention and mental stability.
2. **Cultivating Insight into the Nature of Mental Experience:** The stabilized mind is then employed to gain insight into the nature of the inner world of thoughts, feelings, emotions and reactions.
3. **Cultivating Self-Compassion:** The student participant observes the innate aspirations for happiness and well-being as well as those for freedom from unhappiness and dissatisfactions, i.e., which mental states contribute to fulfillment and which ones prevent it. The participant then makes a determination to emerge from the toxic mental and emotional states that promote unhappiness.
4. **Developing Equanimity:** Normally one tends to hold fast to categories of friends, enemies and strangers and to react unevenly to people, based on those categories, with over-attachment, indifference and dislike. By examining these categories closely, the participant comes to understand their superficiality and learns to relate to people from a deeper perspective: everyone is alike in wanting to be happy and to avoid unhappiness.
5. **Developing Appreciation and Gratitude for Others:** Although people view themselves as independent, self-sufficient actors, the truth is that no one can thrive or even survive without the support of countless others. When the participant realizes interdependence with others and the many benefits that others offer every day, the participant develops appreciation and gratitude for them.
6. **Developing Affection and Empathy:** This requires a two-pronged approach; reflecting on the kindness of others, and reflecting on the many drawbacks of a self-centered attitude. The latter weakens one's self-centeredness, while the former is the active component that strengthens endearment and affection towards others. Additionally, deep reflection on the ways in which these dear beings are caught in suffering – not only those individuals known to oneself but those who may be suffering in far off places, afflicted by war, poverty, disease and so on – engages one's empathy for them and the sense of the unbearability of their suffering. Thus, endearment, and the enhanced empathy that arises from thinking of the suffering of these beings who are so dear to oneself, serves as the catalyst for compassion. The more endearment one feels towards others, the more unbearable one will find their suffering and difficulties, and the more one will rejoice in their happiness and good fortune. One will then be impelled to see them relieved of their distress, which is compassion. Moreover, deeper contemplation and insight into the ways in which myriad benefits are derived from countless others, along with awareness that this kindness should by rights be repaid, enables the participant to relate to others with a deeper sense of connectedness and affection.
7. **Realizing Wishing and Aspirational Compassion:** Enhanced empathy for others, coupled with intimate awareness of their suffering and its causes, naturally gives rise to compassion: the wish for others to be free from suffering and its conditions.
8. **Realizing Active Compassion for Others:** In the final step, the participant is guided through a meditation designed to move from simply wishing others to be free of unhappiness to actively committing to assistance in their pursuit of happiness and freedom from suffering. Consistent meditation training develops a greater capacity for compassion, which eventually will become ingrained and spontaneous.





The steps are distinct, yet integrated, and each builds upon the previous stages. The eight topics of CBCT have been taught in as few as six weeks and as many as twelve weeks (when it is taught in elementary schools, for example). In an eight-week course, one would typically spend one week per topic. If one has more time, one might teach it in ten weeks, for example by spending two weeks on a difficult topic like self-compassion and two weeks on another difficult topic such as equanimity.

Ideally one would have more than one session per week, such as twice a week. This allows the instructor to spend the first session introducing the material for that topic, with a little practice time, and then spend the second session for discussion and more intensive meditation practice. For adults, if there is more than one session per week, each session is typically one hour or ninety minutes; with only one session per week, the session is typically two hours to allow time for presenting the material, discussing it and engaging in a 15-20 minute meditation practice at the end of the session.

Over that time period, the participant will be led through a series of integrated, cumulative meditations necessary for the systematic development of compassion. When practiced sincerely, this training can be a powerful tool for identifying and observing the components of subjective experience; for understanding how subjective experience colors perception of the outer world; and for working with these observations to gain insight into, and perspective on, interpersonal relationships. When successful, this training enhances positive feelings of connectedness to others, while minimizing feelings of isolation and alienation.

Assembling the Conditions that Give Rise to Compassion

As mentioned, when all the conditions for a rich harvest are present, the harvest itself will naturally come as a result. The same holds true for compassion. In CBCT, one cultivates compassion by cultivating the conditions that give rise to it. This is because results only arise from concordant conditions, and not otherwise. As mentioned, just wishing for compassion won't give rise to compassion any more than wishing for more money would by itself yield more money. We may yearn for inner transformation, but if we lack a method for effecting it, our yearning by itself could end in mere frustration. But if one develops the concordant conditions for compassion, then compassion will naturally, even inevitably, arise.

Although the topics of CBCT are taught from beginning to end, it is also useful to look at the conditions in reverse order, examining what are the immediately preceding conditions for compassion, without which compassion would not arise. Those immediately preceding conditions have their own causes and conditions, and that chain continues until we reach the first stage of the practice. So in the next sections of this chapter, we will look at the arc of cultivating compassion from this perspective. That way, we will clearly see all of the conditions that are needed to give rise to compassion, and why.

Two Crucial Conditions for Compassion: Endearment and Impartiality

Compassion is the heartfelt wish to relieve others from suffering. Its immediate precondition is a felt inability to bear witnessing the suffering of others (see [chapter 8](#) in this volume). That is to say, when one sees suffering, one finds it disturbing, rather than pleasing or of no consequence. If one did not feel the suffering of others to be unbearable, one would not be moved to see them relieved of suffering, so it is clear that without this unbearability of others' suffering, compassion for them is not possible. This, in turn, depends on an ability to feel the suffering of others, a sensitivity to their

suffering, and this is what we call empathy.

Furthermore, the degree of unbearability we feel when witnessing the suffering of others correlates directly with how endearing those others appear to us. The closer we feel to them, the more unbearable we will find their pain. Therefore, if we are to have compassion for others, we need to cultivate a sense of endearment towards others. Our sense of endearment is normally very biased, however. We feel it strongly towards our family members, but it takes on a more indifferent tone towards people whom we do not know very well and whom we do not see as directly relevant to our lives, which is the vast majority of people in the world. When it comes to those we dislike strongly, or even hate, we may feel little if any discomfort in seeing their suffering, or may even, in the worst cases, take pleasure in it.

This is the reason why it is important to cultivate impartiality as a condition for the fuller development of compassion and for the arising of unbiased compassion. Without leveling out our strong biases, our compassion will remain limited to the few nearest and dearest to us. With a greater sense of impartiality, however, we will be able to extend our compassion in ever-widening circles, eventually even embracing all of humanity, including those whom we once considered to be enemies.

As we mentioned, the seed of compassion is biologically given in all of us. Cultivating impartiality is like leveling the field, without which even growth is not possible. Developing affection and endearment towards others is like providing moisture that nourishes the seeds and brings about their healthy growth.

Self-Compassion: The Need for a Secure Base

An inability to bear the suffering of others does not automatically translate into compassion, however. It can result in what psychologists call empathic distress. This is when we see the suffering of another, but are paralyzed and become anxious, and thereby want only to flee from the experience, rather than address the suffering of that person and help them. Consider two people who witness a bad car crash and see the injured victims. One becomes so distressed by the sight that she turns away and experiences intense anxiety; this is empathic distress. The other witnesses the same thing but rushes over to see if she can be of assistance; this is empathic concern. What is necessary to ensure that witnessing suffering leads to empathic concern, and not empathic distress, is a secure base. A secure base is a type of courage that comes from an inner confidence that suffering can be overcome.

An analogy would be an addict who is in the throes of his addiction and can't see a way out of it. When he sees another addict suffering, this triggers his sense of hopelessness and despair, and he experiences only anxiety. But if he sees that the true source of his addiction is a craving that can in time be brought under control and dealt with, and if he thereby feels a sense of inner confidence in his ability to overcome his affliction with help, his response may change. He now sees a light at the other end of the tunnel, so when he sees a fellow addict suffering, he has a secure base to respond to that person with empathic concern and an offer of help, instead of only responding with empathic distress.

The Indian sage Shantideva hinted at this relationship when he wrote, "If one could not even dream of such a thought for oneself, then how could it be possible to have such a thought for others?" One interpretation of this verse is that Shantideva is suggesting that if one does not have the understanding that one can emerge from suffering for oneself, and the determination to do so, then how could one recognize that others can also be freed from suffering, and determine to help





them do so?

The question then becomes: How does one generate a secure base? Security and confidence come from correctly identifying the underlying causes of one's suffering and then generating a powerful determination to emerge from them. Also important here is recognizing our misplaced desires – misplaced because they are desires for things that cannot bring us long-term happiness, and in fact often bring us the opposite, namely suffering – and developing a sense of disenchantment and disillusionment with them. This is akin to the situation of an alcoholic who must realize that alcohol is not a source of happiness, but rather a cause of suffering. It is natural for us to chase after the things that we think will bring happiness, and flee those things that we find unpleasant. After analysis, however, we may find that those things we were blindly chasing were in fact causes of suffering, while we rejected things that could bring us lasting happiness. Identifying such mistakes is the first step, but the second step is to resolve to change our habits and perceptions, so that we put ourselves on a path that leads away from suffering and towards happiness. When we realize that the causes of suffering can be transformed, and that we ourselves are in a position to transform them, and when we resolve to do so, we cultivate self-compassion (see [Box 1](#) in this volume). It is called self-compassion because it is the genuine way for us to care for ourselves and relieve ourselves of unnecessary suffering.

Gaining Insight into Our Mental Life and Cultivating Mindfulness

The point here is neither to deny one's cravings, nor to indulge in them, but rather to observe them and relate to them in a more healthy manner, gradually gaining a greater degree of mastery over them. This can only happen through the cultivation of a greater state of awareness of our own mental experience. Giving in to craving or aversion only reinforces such patterns, but suppressing them will not work either. The third possibility, between indulgence and asceticism, is transformation. This comes from gaining insights into the emotional patterns that drive our cravings and aversions. That transformation is possible when one can relate to one's experiences in a non-reactive, neutral manner without craving or aversion. From that non-reactive place, one can then use the gap between stimulus and response to decide how to respond to the given emotion. If it is a constructive emotion, one can support it; if it is destructive, one can take measures to limit it.

When an actual situation arises, it is hard to catch ourselves and move from a reactive place to a non-reactive place, where we can respond thoughtfully and rationally, instead of reacting instinctively or out of established but unhealthy habit patterns. Fortunately, we can practice this in meditation, and cultivate insight into our mental experience through the practice of resting the mind in its natural state. Natural state here means an uncontrived state of mind that is not chasing after something that we crave, nor pushing away something that we dislike, but merely observing whatever arises in experience in a non-judgmental way. Gradually we learn to relate to experiences without getting immediately caught up in them, and this transforms the way we experience craving and aversion. That, in turn, allows us to practice self-compassion, because we now have the tools to gradually wean ourselves away from emotions and thought patterns that lead to suffering, by not giving in to them, and instead strengthen constructive emotions and thought patterns that lead to greater well-being and happiness for ourselves and others.

This practice of observing our inner mental life, whether on the meditation cushion or out in active life, can only take place if we have developed some degree of attentional stability. Generally we are not trained to attend to the moment-by-moment experiences that take place in our minds. We may not notice emotions arising until they become quite strong, or if we do notice them, we may become too caught up with them or distracted by something else before we can address them. Therefore, the cultivation of mindfulness is an essential foundation for learning to rest the mind in

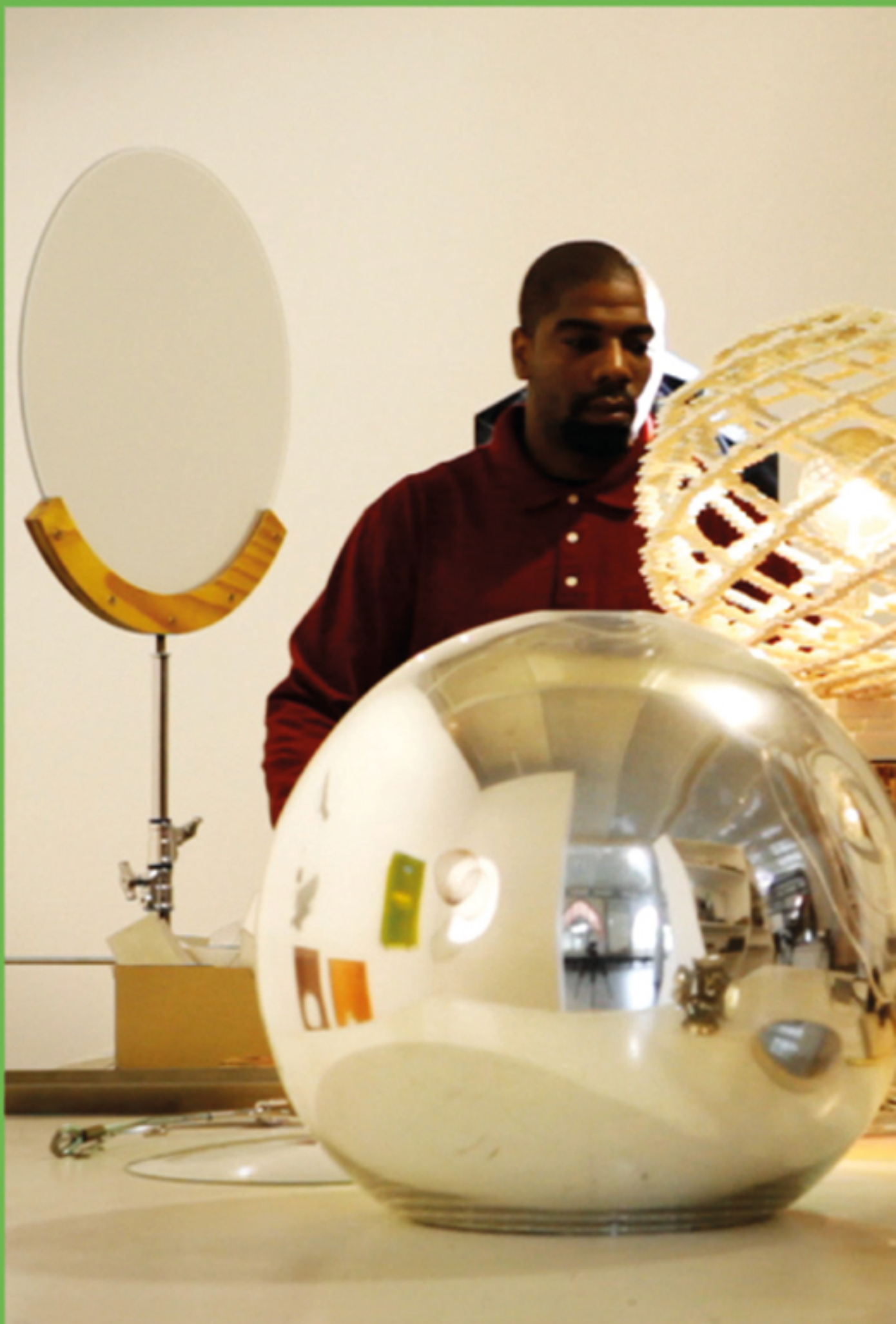
its natural state and gain insight into our inner world. In CBCT, participants develop mindfulness by focusing on the breath and learning to attend to it moment by moment as it enters and leaves the body. Gradually they refine their attention through this process, like a scientist polishing and focusing a microscope. Once their attention is a bit more refined, participants can use their minds to engage in the types of meditations explained above, and they have a great tool for the cultivation of compassion. Mindfulness is therefore foundational and essential for the cultivation of compassion.

Conclusion: Teaching and Practicing CBCT

A full manual is available for instructors trained in CBCT, which presents further information on each stage of the protocol, instructions for guided meditations, definitions of key concepts and terms, and sample exercises for teaching the topics. Audio recordings of guided meditations for each topic are also made available to practitioners. What is considered most important is that instructors have a firm grounding in the key concepts of CBCT as outlined in this chapter, the reason behind their sequence, and how they work together to create the necessary conditions for the arising of genuine, unbiased compassion. Although the manual provides examples and exercises that instructors can use, instructors who have a good understanding of CBCT may use their own exercises and examples, as long as the content they are teaching remains the same.

Most important is the presentation of the concepts in ways that challenge established patterns of thinking and reacting, and enable participants to begin to look at situations and relationships in a critical way. The guided meditations then employ analytical meditation to examine such patterns and beliefs critically within the meditation session itself. For example, a discussion on equanimity and impartiality might involve an exercise where participants draw a scenario from a hat and then stand along a line on the ground that symbolizes how much empathic care they feel towards the person whose situation is described in the scenario. The scenario might be “A person who assaulted one of your family members is released early from jail for good behavior”. Participants then take their place on the line, indicating how much they can empathize with the person in question, and are asked to volunteer explanations for their choices. The instructor may then ask them, “What if the person released is your son or daughter?” Such additional information typically involves some participants shifting their position on the line, prompting further discussion. In the actual guided meditation following the general discussion, participants visualize a friend, a neutral person, and a difficult person in their lives. They then imagine something good befalling each one of these persons in turn. As they do so, they notice their own reactions and how uneven they are. They then imagine something bad befalling each person, and notice how the empathic care and compassion that arises tends to be uneven depending on whether the person is a friend, a stranger or someone with whom they have difficulties. Then, remaining in the meditation, they are guided to analyze their reactions and the unevenness of their feelings, inquiring whether such unevenness is warranted or not; whether we value such bias when we see it in others; what the disadvantages of bias and the advantages of impartiality are; and so on. Should they reach certain conclusions, such as that they wish to cultivate more impartiality, they can then remain single-pointedly on that conviction until it penetrates more deeply into their minds. This would be one example of: 1) using an exercise to raise a topic of CBCT; 2) leading a discussion to explore it in more depth; and engaging in 3) analytical meditation to investigate the topic further within the framework of a meditation session; and then 4) non-analytical stabilizing meditation to deepen and reinforce the change in perception and, eventually, behavior.

It is our hope that researchers will continue to investigate the use of CBCT and its potential in a variety of clinical and educational settings. As a form of meditation that explicitly employs analytical styles of meditation alongside non-analytical ones, we hope that research in CBCT leads to further





exploration of analytical meditation and its potential benefits. Furthermore, as a style of meditation that aims to actively cultivate universal human values, we hope that interest in CBCT contributes to the understanding of secular ethics and the role it can play in education, healthcare and society at large[9].

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Box IV

Compassion Cultivation Training (CCT)

Thupten
Jinpa Langri



Leah
Weiss



Compassion Cultivation Training (CCT)

“The beautiful thing about compassion is that when it spontaneously arises in you, an inner door opens onto that infant’s experience of love, which is part of your fundamental reality.”

His Holiness the Dalai Lama

Compassion Cultivation Training (CCT) is an eight-week program designed to develop and enhance the qualities of compassion, empathy, and kindness both for oneself and for others. The course integrates contemplative practices, secularized and adapted primarily from the Tibetan tradition, especially *lamrim* and *lojong* meditation practices, as well as dyadic interactive exercises with insights from psychology and scientific research[1] - [9]. The program was developed at Stanford University.

CCT is thus comprised of the following four elements:

1. Psycho-cognitive education that focuses on developing skills pertaining to greater awareness and facility with cognitive and affective processes, as well as their connection to behavior and habitual patterns.
2. Training in secularized meditations that draw on visualization and reflective processes adapted from the Tibetan Buddhist contemplative practices.
3. Dyadic interactive exercises that are aimed at eliciting and embodying specific affective states.
4. Informal homework assignments, including a daily guided meditation, that support participants in integrating the skills they are developing into their personal and professional lives.

Introduction

This protocol on the Compassion Cultivation Training program was developed under the auspices of the Center for Compassion and Altruism Research and Education (CCARE), at the Stanford Institute for Neuro-Innovation and Translational Neuroscience (SINITN), Stanford University. CCARE’s founder, Dr. James Doty, describes the goal of the protocol in these words:

The Center for Compassion and Altruism Research and Education (CCARE) is comprised of a multi-disciplinary team of scientists and scholars at Stanford University whose goal is to bring the tools of psychology and neuroscience to the study of empathy, compassion and altruism. While the scientific understanding of these complex behaviors is itself a noble and worthy goal, ultimately such work would be of little value unless the knowledge gained could be utilized for the benefit of not only the scientific community but society as a whole. The ultimate goal of these efforts is to create tools that individuals can use to develop and cultivate such behaviors within themselves.

The protocol for CCT was developed by Thupten Jinpa, with contributions from an interdisciplinary team of researchers including neuroscientists, psychologists and contemplative scholars. CCT belongs to the educational part of CCARE or the E in the acronym CCARE.

Research

In the first randomized controlled trial of CCT[1] a community sample of 100 adults were randomly assigned to eight weeks of CCT or a eight-week waiting list (WL) where participants waited eight weeks before receiving treatment. Participants were assessed on several measures of compassion including the Fears of Compassion Scales (FCS)[10] and Self-Compassion Scale (SCS)[11]. The FCS is comprised of 38 items and assesses three orientations of compassion: fear of compassion *for others* – compassion felt for others; fear of compassion *from others* – being the recipient of compassion; and fear of compassion *for self* – being compassionate towards oneself. SCS is a 26-item measure of how one extends compassion to one's self in instances of perceived inadequacy, failure or general suffering. The SCS highlights three main components: *self-kindness*, or being warm towards oneself; *common humanity*, or recognizing that suffering and failure are part of the shared human experience; and *mindfulness*, or taking a balanced approach to one's feelings and emotions. After eight weeks, when compared to WL, CCT resulted in significant improvements in all three domains of compassion – FCS *for others* ($p < .003$), FCS *from others* ($p < .04$), and self-compassion (FCS *for self*: $p < .007$; SCS $p < .003$) (see Figure 1). Further, the amount of time spent in meditation practice was also tracked during the eight-week course. Interestingly, more meditation practice during CCT was associated with increased compassion for others. In sum, this study demonstrates that specific subtypes of compassion can be enhanced through CCT and formal meditation practice can enhance compassion for others.[1]

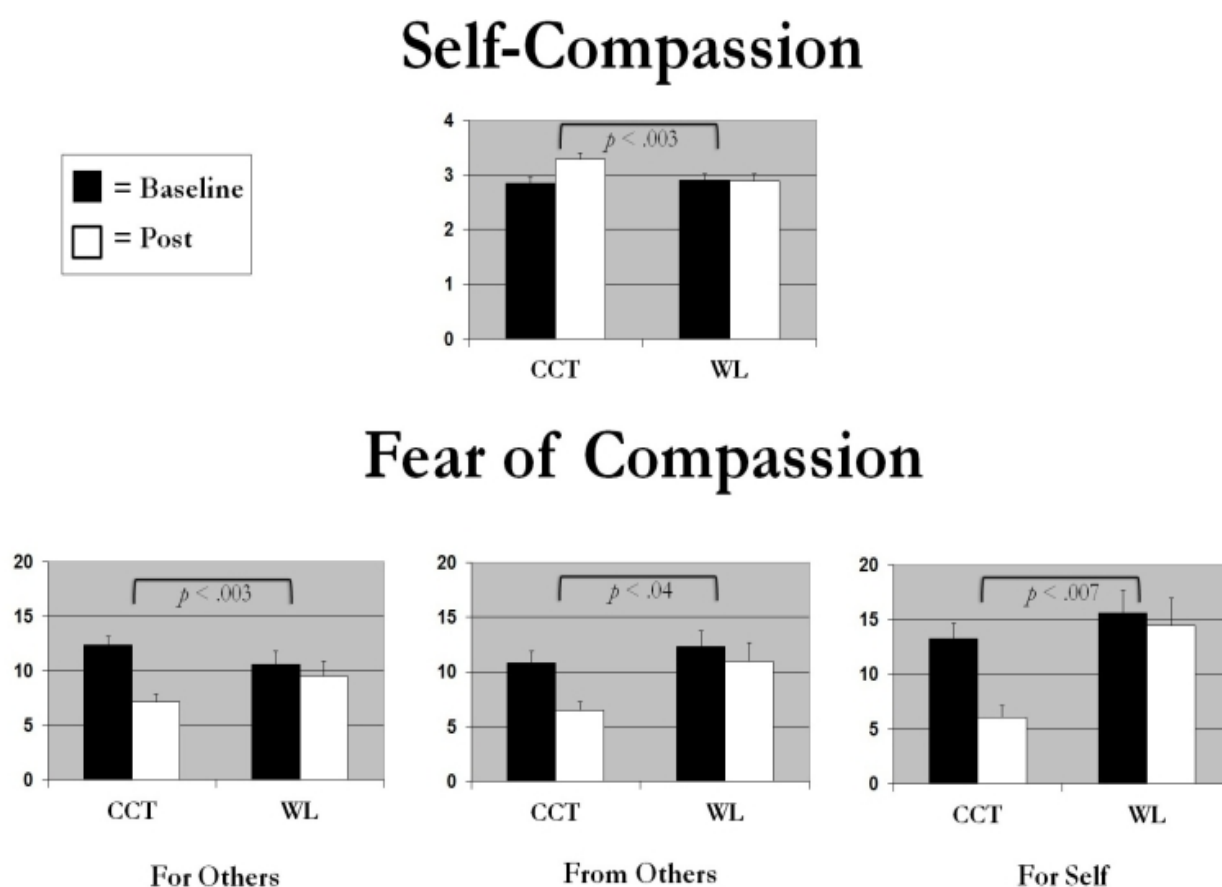


Figure 1. Enhancing Compassion Through CCT.

Structure of the Compassion Cultivation Program

What follows is a summarized description of the step-by-step protocol developed specifically for

the cultivation of compassion – the genuine wish for others to be relieved of their suffering. Broadly defined, we understand compassion to be a multidimensional process, the key components of which are: 1) an *awareness* of suffering in others (cognitive/empathetic); 2) *sympathetic concern* related to being emotionally moved by suffering (affective); 3) a *wish* to see the relief of that suffering (intentional), which might result in 4) a *responsiveness* or readiness to help relieve that suffering (motivational). Thus, we view compassion as a combination of a cognitive perspective and an affective state that gives rise to cooperative and altruistic behavior.

This compassion cultivation protocol is designed to be implemented in the context of an eight-week course. The course proceeds on the basis of a 2-hour session once every week, consisting of a) **a guided group meditation, which is complemented with** b) **pedagogical instruction, including active group discussion**, and c) **various practical exercises related to the specific theme of the week associated with cultivating compassion**. During the period of this course, all participants are expected to undertake a 15–(building up to) 30 minute daily meditation at home, on the basis of recorded guided meditation instructions that progress step by step, culminating in the meditation of the final week, which is an integrated practice. This last meditation instruction has been designed to be a daily compassion meditation for participants who wish to adopt it. In addition to these formal sitting meditations, the course participants should be instructed to also undertake informal “in the world” practices, whereby they can apply the particular themes of the week to everyday life situations.

The Compassion Cultivation Training (CCT) program consists of six steps. Step 1 involves settling the mind and learning to focus it – basic skills essential for any form of reflective mental exercise – as well as learning to dispassionately observe one’s own thoughts and emotions, a basic element of mindfulness practice. Steps 2 through 5 pertain to actual compassion cultivation. They are: *loving-kindness and compassion for a loved one* (Step 2); *loving-kindness and compassion for oneself* (Step 3); establishing the basis for compassion towards others by *embracing shared common humanity and appreciating the deep interconnectedness of self and others* (Step 4); and *compassion towards others*, including all beings (Step 5). These are followed by what could be called *active compassion practice* (Step 6), which involves imagining taking away others’ pain and sorrow and offering to them one’s own happiness, joy and everything that is good. Finally, in week eight, the course presents an integrated practice where, on the basis of the practices of the preceding steps, a complete daily compassion meditation is presented.

The formal meditations presented in this protocol are principally derived from compassion practices found in the Tibetan Buddhist tradition. They have, however, been adapted to suit the sensibilities and requirements of a multicultural context and for use by people from diverse ethnic, religious and cultural backgrounds. Special care has been taken to ensure that the practices presented here are thoroughly non-denominational and secular.



Thupten Jinpa Langri
"Self-compassion Practice"

0:21 min

It is expected that the contemplative approach to cultivating compassion presented in these meditations will be complemented by other important aspects of the whole compassion cultivation





program. In conducting the course, instructors are expected therefore to offer a) some basic psychological education pertaining to the dynamic interactions between thoughts, emotions and feelings, and their relation to one's well-being; b) a cognitive reorientation of outlook, so that there is a deeper recognition of the value of compassion, especially in relation to one's own peace and happiness, healthy relations with others and the world, and so on; c) "moistening" of the heart through reading inspiring stories or poetry; d) creative interactive practical exercises that could help evoke specific affect states relevant to the theme of a particular step of the compassion cultivation program (for example, these could include narrating a story and exploring how a compassionate response to specific events could unfold); and, finally, e) informal homework exercises that encourage students to integrate the principles of compassion they are working with into their daily lives and interactions.

Recordings used for guided meditations are distributed in hard copy format or through a password protected website. We are exploring opportunities to further enhance the experience of the course through the use of technology and perhaps to offer elements of the training online as well.

Rationale behind the Sequence of Steps in the CCT Program

STEP 1, *Settling and Focusing the Mind*, aims to provide basic skills essential for any reflective, contemplative practice (such as meditation) that requires a degree of ability to still one's mind and focus it. Here, two breathing meditation exercises are presented. These breathing meditations are preceded by a preliminary breathing exercise called the "cleansing breath" exercise, which involves taking a series of deep diaphragmatic breaths to help release stress and tension. This preliminary exercise is followed by the first breathing meditation, which involves silent mental counting of breath cycles, and by a second meditation, which involves resting one's mind simply on the awareness of the movement of one's breath. Thus, as part of the CCT program, a basic form of mindfulness – in the sense of being able to apply one's mind dispassionately to a chosen object, one's breath for example – is developed as well. In fact, throughout the entire eight-week period, all formal sitting contemplative practices are preceded by a brief session dedicated to the development of this basic skill. Another key feature of mindfulness practice, namely the ability to observe the arising of one's thoughts and emotions and learning to dispassionately relate to them, is taught from the second week onwards, more as part of the psychological education on the dynamics of our perceptions, thoughts, attitudes and their relation to our emotions and behavior and habitual patterns.

STEP 2, *Loving-Kindness and Compassion for a Loved One*, is designed primarily to help us recognize what the experiences of love and compassion feel like when they occur naturally in us. The practices offered in this session trade on mental processes that naturally occur in us and that are crucial for conscious, deliberate cultivation and nurturing of compassion in our hearts and minds. The meditation and the accompanying practical exercises are aimed at helping us recognize, both physically and psychologically, the feelings of warmth, tenderness, concern and connectedness associated with the experience of compassion and loving-kindness, by deliberately evoking our feelings for a loved one or person that is close to us and relatively easy to engender feelings of connection with.

In STEP 3, *Loving-Kindness and Self-Compassion*, one learns to apply these feelings that characterize a loving and compassionate relation – warmth, tenderness, acceptance and a deep sense of concern – to oneself. This step is critical because without the ability to genuinely connect with one's own feelings and needs, and learn to relate to them with compassion, it is difficult to genuinely develop compassion for others, especially strangers and adversaries. Acknowledging that this step is often a great challenge to many people, the practices associated with it are spread

over two weeks, with cultivating compassion for oneself as one subsection and cultivating loving-kindness for oneself as the other. Step 3a focuses on qualities such as greater self-acceptance, tenderness, non-judgment, and caring in self-to-self relations, while Step 3b focuses on qualities such as warmth, appreciation, joy and gratitude. Participants in the course describe the loving-kindness and self-compassion as pivotal components of the course that impact their daily lives and relationships in significant ways.

STEP 4, *Establishing the Basis for Compassion towards Others*, involves two key elements essential for generating genuine compassion toward others: 1) embracing shared common humanity and 2) developing appreciation of others. The first is deep recognition of the basic sameness of self and others with respect to the fundamental aspiration to attain happiness and overcome suffering. This is the essential ingredient for empathy, the ability to *identify* with others – in other words, to put oneself in others’ shoes. This is done progressively, beginning with a loved one, then moving to a neutral person and from there to a difficult person, and culminating by extending this recognition of sameness to all beings. The second element is appreciation of the deep interconnectedness of self and others, especially acknowledging how one depends on countless others both for basic survival and for well-being. On this basis, a sense of *gratitude* towards others is developed. Common humanity, or this notion that others are “just like me”, repeatedly is cited as a skill that course participants find tremendously impactful, especially in the context of challenging interpersonal situations. This step trains participants in the skill of “perspective taking”, which allows them to find satisfaction in the process of working across difference.

STEP 5, *Cultivating Compassion towards Others*, builds on the two bases of Step 4 to cultivate compassion for *all* beings. Here, too, one learns by moving from focusing on a loved one to focusing on a neutral person, then on a difficult person, and finally on all beings. In essence, what this step does is expand the circle of one’s concern to embrace all humanity, simply through the deep recognition that, just like me, all others wish to achieve happiness and overcome suffering and that they too are deserving of achieving happiness and freedom from suffering.

STEP 6, *Active Compassion Practice*, involves explicit evocation of the altruistic wish to *do something* about others’ suffering. In formal sitting practice, this essentially takes the form of a visualization practice that, as a first step, imagines “taking away” from others both their suffering and the destructive patterns of thought and behavior that underlie their suffering. The second step in this meditation involves imagining “giving” or offering to others everything that is beneficial in oneself, including one’s material prosperity, happiness, joy, and patterns of thought and behavior that bring about happiness and a deeper sense of well-being. In the Tibetan source, this particular form of compassion practice is known as *tonglen*, literally, “giving and receiving”. The meditation for the final week is an integrated practice that combines the essential elements of all six steps into a compassion meditation practice that can continue to be done daily by participants who choose to adopt it.

Example Exercise

The “Eyes on” Exercise

This is a pair exercise, so the class is divided into twos. There are several ways this exercise can be performed, all of them involving the exercise partners looking into each other’s eyes and listening to a guided visualization. One version of the exercise could be the following:

- In this practice, we will start by having you turn your chair to face your partner directly. Bring your chairs close enough that each of you can see your partner’s face clearly.

- Start by taking a good look at your partner's face and notice every detail, including eyes, eyebrows, the shape of the cheeks and jaw, the color of the skin, the hairline and so forth.
- Now close your eyes and simply notice how you feel. Open your eyes, and while remaining silent, consider how your partner feels being seen, being the object of your attention right now. Now close your eyes and simply observe what you feel.
- With your eyes still closed, consider that the person seated right in front of you, a fellow human being, has had many highs and lows in life, just like you. Consider that this person wishes to be free from confusion, angst, pain and loneliness, just like you. This person wishes to be free from anger, hatred and jealousy, just like you. Now open your eyes and really see your partner. Now close your eyes and notice what you feel.
- With your eyes still closed, gradually generate the intention, *"May you be well, happy, content and balanced. May you find the sources of love, openness, freedom and mental clarity."*
- Open your eyes, look at your partner, and continue to offer the partner your wishes for his or her well-being. Close your eyes and notice what you feel.
- Now open your eyes and thank your partner in this exercise.
- Take a couple of minutes to discuss with your partner your experience of this exercise.
- Finally, the teacher facilitates a group discussion about what people observed during this exercise.

Generic Courses and Population-Specific Applications

As described above, the CCT protocol was created as a collaboration among an interdisciplinary team. CCT was developed as an interactive process, it was revised in the wake of having taught it and having learned from the experience of participants. It is important to note that we see this program as a generic version, and anticipate that it will be adapted to meet the needs of specific populations over time. Based on our experience thus far, we see potential for robust versions in healthcare[12] - [14], for teachers in K-12 educational domains[15], for workplace leadership[16], [17], for trauma survivors[18], [19] and for couples work[20], among other applications.

CCT has been taught in its entirety twenty-one times at the time of writing this chapter. The course has been offered at Stanford University, UC Berkeley, Google, the Cancer Support Community, Sharp Healthcare in San Diego, the VA Palo Alto Healthcare System for Healthcare Providers, the VA Palo Alto Healthcare System on the Residential PTSD Unit, and the Redwood City Veterans Center.

We also have developed shorter modules of compassion training derived from the eight-week course that are packaged in 1-hour, 2-hour, daylong and weekend modules. These shorter offerings have been taught at the VA Palo Alto Healthcare System, Kaiser Permanente for Behavioral Health Staff, Esalen Institute and at Stillheart Institute, among other settings. In the upcoming months CCT will spread to an array of other areas by way of the teachers we are training in our teacher training program.

Teacher Training Program

In the fall of 2012 will commence CCARE's new Compassion Cultivation Training Teacher Certification program, which is a part-time, 12-month training for professionals who want to deepen their ability to share the science, philosophy and pedagogy of compassion. This cohort is

comprised of 50 individuals selected from an international pool of applicants. Graduates who fulfill all program requirements, including a period of supervised teaching, will be certified to teach CCARE's Compassion Cultivation Training (CCT) course. The teacher training program consists of academic courses like the Science of Compassion and Philosophical Perspectives on Compassion. The program also emphasizes meditation practice, group facilitation skills and methods for collecting evaluative data pertaining to participant experience.

The rationale for the teacher training program is to help meet the demand for compassion education in a variety of sectors. Participants in this first program come from diverse fields, including environmental protection, K-12 education, the department of defense, physicians and a range of healthcare providers, researchers, psychotherapists, corporate consultants and veterinary medicine practitioners, to name but a few.

Conclusion

We are heartened to see the impact that this training has had in a diversity of settings in the past two years that it has been offered. We anticipate developing further insight into the mechanisms of the processes in the protocol as research is conducted on the course in a variety of settings and across populations. Throughout this process, we remain committed to CCARE's mission to "allow humans to become more compassionate and to engage more readily in altruistic behaviors towards themselves and others".

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Box V

The ReSource Training Protocol

Boris
Bornemann



Tania
Singer



The ReSource Training Protocol

Introduction

This chapter describes the training protocol of the ReSource Project that aims at cultivating compassion over a duration of about nine months. The ReSource Project is a large-scale scientific study funded by the European Union (Reference No.: ERC-2007-StG; Grant Agreement Number: 205557) and the Max Planck Society and is carried out by the Department of Social Neuroscience at the Max Planck Institute for Human Cognitive and Brain Science, under the supervision of Prof. Dr. Tania Singer.

History and Development of the ReSource Training Program

The development of the training protocol for the ReSource Program was inspired by multiple sources and extended over several years. The origin of this program is grounded in the work of the principal investigator, Tania Singer, on the neurological bases of empathy, compassion and cognitive perspective taking. In the context of this work, she had the chance to meet long-term compassion practitioners such as the Buddhist monks Matthieu Ricard and Barry Kerzin, and many others who in countless conversations and collaborations have helped develop the theoretical backbone of the present program. Other early influences on this program came from colleagues such as Paul Ekman and Paul Gilbert as well as the continued learning experiences provided by the Mind and Life institute in the context of many conferences and multiple personal retreats. Especially noteworthy in this context is the so-called Satori Process, which is based on contemplative dyads[1], [2]. In an altered form, these contemplative dialogs became one of the core exercises of the ReSource Project as we felt that intersubjective abilities and social cognition could be more easily cultivated in real contact with other people than through imaginary encounters, as common in single meditation practices. Another strong source of inspiration for some of the exercises was Tania Singer's experience with the "Non-Violent Communication" program[3] (taught by Regula Langemann and Suna Yanamer, see also [video chapter on Non-violent Communication](#) in this volume).

After this original developmental period, the protocol was further refined together with a protocol development group that met weekly over the course of a year (composed of Tania Singer, Boris Bornemann, Willi Zeidler, Christina Bochow and Matthias Bolz) and included selectively the help of experts during several in-depth workshops. The first part of the training program (Presence) was strongly influenced by the work of John Kabat-Zinn and his eight-week Mindfulness-Based Stress Reduction program[4]. The affective part was initially inspired by previous research done in our lab on the effects of loving-kindness, empathy and compassion on subjective well-being and the brain[5], [6] (see also [chapter 15](#) in this volume) and supported by contemplative scholars such as Fred von Allmen, Ursula Flückiger, Marie Mannschatz, Sylvia Wetzel and Renate Seifarth. It was complemented by elements of the self-compassion program by Neff and Germer (see [chapter 16](#) in this volume). Finally, the perspective part was newly developed on the basis of a) previous research on cognitive perspective taking, b) self-work rooted in the Internal Family Systems[7] guided by Tom Holmes[8] and c) classical contemplative meditation exercises[9].

Important inputs for the adequate use of contemplative dyads were given by Kira Kay and Clare Soloway. Johannes Latzel supported the development of the new dyadic exercises which are central to the training.



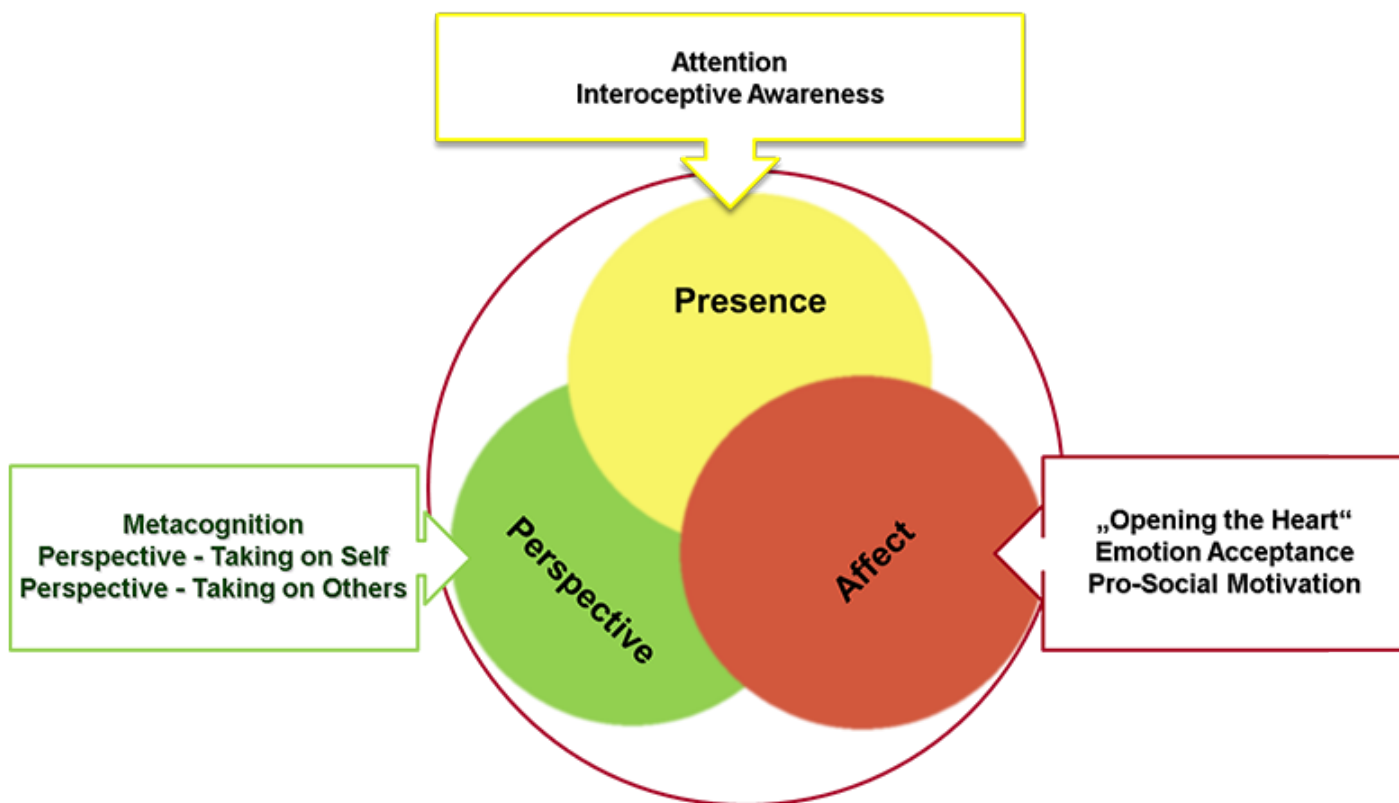


In a third and final phase, the week-by-week detailed program schedule containing the exact exercises and motivation talks for the nine-month training program was collectively elaborated with a team of 17 meditation teachers and psychotherapists recruited as instructors for the [ReSource Project](#). The team of teachers brought in a variety of additional expertise ranging from different psychotherapeutic practices (e.g., Cognitive Therapy, Gestalt Therapy, Acceptance and Commitment Therapy, Internal Family Systems Therapy, etc.) to long-term meditation experiences in different Buddhist traditions (Zen, Theravada, Tibetan Buddhism, etc.) and conflict resolution practices (e.g., Non-Violent Communication, see [video chapter](#) Non-Violent Communication in this volume). With collective efforts of the protocol development team, the team of teachers and additional experts, the ReSource Protocol in its present form was finalized in countless workshops and individual labor over a period of another six months.

At the time of publication of this book, the ReSource Protocol has been completed in its first version but we are certain that it will be continuously refined in the coming years according to the experiences made while teaching, the respective needs of the participants and particularities of given future studies or training settings.

The Structure of the ReSource Program

The ReSource Model (see Figure 1) has been developed as a foundation for this nine-month longitudinal study. The psychological and neuroscientific concepts that form the backbone of this training program are explained in more detail in [chapter 10](#). The ReSource Model conceives compassion as an overall attitude to life and dissects this concept into three broad domains of underlying dispositions and skills needed for a compassionate way of being. The first domain is called “Presence”, that is, the ability to turn towards and stay with the experience of the present moment. This forms the basis for the deliberate cultivation of mind states through formal practice and is indispensable for the skills and dispositions of the other domains to become effective in real-life settings. Key components in this domain are attention regulation and awareness of body sensations. The second domain is called “Affect”. This comprises the ability to generate or open towards feelings of warmth and benevolence for oneself and others, the ability to accept difficult emotions, as well as to cultivate prosocial motivations. The third domain is called “Perspective” and comprises more cognitive skills, such as taking a metaperspective on thoughts and the self, as well as assuming other people’s perspectives.



The total time of the training is 39 weeks. The training focus changes every 13 weeks, successively covering the three domains. Of the 13 weeks, eight are dedicated to teaching or refining the contemplative practices of the module, and five are used to deepen the practices (no new practices or content introduced). Participants always start with the Presence module. The order of the other two modules (Affect and Perspective) is essentially interchangeable. All modules begin with a three-day retreat. After this, participants meet with a team of teachers (usually two) and their group for weekly sessions.

Each module features two core exercises that the participants are recommended to engage in on a daily basis, for a minimum of 30 minutes. These exercises are designed to train the core processes of the module, as specified in the model ([chapter 10](#) in this volume). They are introduced in the retreat of the respective module and repeated in every weekly session. Additional exercises help to deepen and widen the targeted skills and dispositions and foster their application in everyday life. The training is supported by a web platform and a smartphone app, where audio files (guided meditations) for the exercises can be downloaded.

To characterize the contents and procedure, we will describe the two core exercises of each module and outline the topics and additional practices covered in the retreats and weekly sessions.

Presence

In this module, participants learn to acknowledge the reality of the present moment as it is. They refine their abilities of observing what is going on inside of them, regarding both psychological events (introspection) and bodily events (interoception), as well as of deliberately directing and sustaining their attention. The two core exercises for this are Awareness of the Breath and a Body Scan, both of which train central aspects of the abilities (Text Box I & II).

Presence Core Exercise 1: Awareness of the Breath



This basic practice, common to almost all contemplative traditions, is about focusing the attention on an object, the breath, and returning to it whenever the attention has gone elsewhere. Various methods are possible within this practice. The breath can be observed in different body regions (e.g., abdomen, nostrils), which is said to strengthen different aspects of attention (e.g., stability, vividness)[10]. Scaffolding practices such as counting the breaths can be employed[10], [11]. These details of the practice are varied throughout the training and can be adapted to individual propensities of the participant. The core features of this practice, however, ensure that participants strengthen their abilities to monitor their mind activity and deliberately direct their attention.

Presence Core Exercise 2: Body Scan



The term Body Scan was coined by Jon Kabat-Zinn[12]. The practice itself can be traced to the Satipatthana Sutta[13], the discourse on the establishment of mindfulness, which is attributed to the Buddha. It is an essential part of Vipassana meditation[14], the core practice of Theravada Buddhism.

The body is mentally scanned, usually from top to bottom or bottom to top, by focusing on the sensations in the various body parts. The practice can be done in the supine position or while sitting (or, in principal, in any other position). In the lying position, it is easier to feel the various sensations, whereas in the sitting position it is easier to remain wakeful and alert.

Again, details of the practice can be varied. Within the training concept, the important features of the practice are the pervasion of the body with awareness (interoception), and the continuous deliberate focus of attention on the present moment.

Outline of the Training

In the retreat, participants are introduced to meditation as a method of familiarizing themselves with their own minds and cultivating certain propensities in it. They reflect on the role of attention in stabilizing their minds and the benefits of being more aware of the present moment. In the first retreat, participants mainly practice attention to breathing and the body scan, interspersed with walking meditation.

The 13-week course is then similar to established mindfulness courses[4], [15] in that the ability to be present and aware is extended in order to be available throughout all sorts of life situations. Different sensory modalities are targeted in the weekly session, with specific exercises helping participants to be mindful of sound, vision, touch, smell and taste. Guidelines are given for integrating the practice both formally and informally into everyday life.

Affect

This module focuses on the cultivation of emotional and motivational aspects of compassion. Participants try to get in touch with a sense of benevolence, love and care within them and cultivate these mind states towards themselves and others (“opening the heart”). They learn how to work with obstacles to these mind states, such as fear, anger or sadness (“emotion acceptance”). Finally, prosocial motivation and action are discussed as necessary complements to feelings of kindness and benevolence in bringing about compassion in everyday life.

The first core exercise in this module is inspired by the old contemplative practice of *metta* meditation (loving-kindness meditation). The second core exercise is a *dyad* (partner exercise) in which participants practice observing and accepting difficult emotions as well as opening towards feelings of gratitude.

Affective Core Exercise 1: Heart Meditation



The practice is derived from *metta* practice, which in Pali means loving-kindness, friendship, benevolence or good will. It is mentioned in the earliest texts of Theravada Buddhism[13] and variants of the practice are common in many contemplative traditions[16], [17] (see also Box I and Box VII in this volume).

Generally, the meditator sits relaxed and tries to connect to intentions and feelings of love, care and benevolence. These can be directed either towards oneself, to a specific other or even to a group or all living beings. The meditator uses sentences such as “May you be happy”, “May you be healthy”, “May you be free from danger”, “May you live with ease”, which he silently repeats to himself to remain focused on the intention. Alternative ways of connecting to a sense of benevolence and care, such as mental imagery or concentration on bodily sensations of ease and warmth can also be used. These intentions can first be directed to loved ones and oneself and then slowly be expanded to people that appear affectively neutral or even difficult.

Affective Core Exercise 2: Affective Dyad



This is a partner exercise that can be practiced in the sessions and at home. Similar exercises have been used in interventions designed within the field of positive psychology[18], [19] and the form of the exercise resembles the contemplative dyads used in Satori or Enlightenment Intensive Retreats[1], [2].

In the sessions, participants are paired with a partner and sit in front of each other. While one partner speaks, the other listens mindfully without reacting verbally or through facial expressions. One of the partners starts, and first tells the other about a situation of the day that has evoked *difficult emotions* and then about a situation or an event that she is *grateful* for. Then it's the other one's turn. Each partner speaks for 5 minutes, with half of the time devoted to the difficult situation and emotions and the other half to gratefulness. In the weekly sessions, timing is kept by the teachers. When practiced during the week, two participants are paired and call each other via a smartphone app that takes care of the timing through electronic bell sounds. In the weekly sessions, participants practice with multiple partners. For home practice, two participants are paired so they can make appointments for the phone calls. Partners are changed on a weekly basis.

The exercise is designed so that participants can practice the recognition of negative emotions (as a basis for accepting and being with them), and learn gratefulness, which is a powerful basis for feelings of warmth, social connectedness and even prosocial motivations[20].

Outline of the Training

In the retreat, both core exercises are introduced. Participants also learn a variant of the body scan, termed the “compassionate body scan” in which they practice turning towards body sensations and upcoming emotions in a curious and loving way[21]. These skills are elaborated on in teachings and additional exercises to strengthen participants’ ability of coping with difficult emotions that may block compassion. They also practice the acknowledgment of difficult emotions in the dyadic exercise. Here, the continuous interchange with all members of the group about difficult life situations helps to bring about a sense of interconnectedness through the universality of human suffering (“common humanity”, see [chapter 8](#) and [16](#) in this volume). To foster participants’ understanding of compassion, we contrast it with empathy for suffering, which we understand as pure emotional resonance (see [chapter 15](#) in this volume). Through guided meditations, we aim at making the difference available to experience, so that participants can distinguish helpful (compassionate) ways of turning towards others from potentially harmful (purely empathic) ones.

In the 13-week course, we successively build up the heart meditation, using objects such as self, a benefactor, a close friend, a neutral and a difficult person or groups of people, cultivating the wishes for them to be happy and free of suffering. Throughout the entire course, we pay heed to the variability of people with regard to the ease with which these wishes can be generated and felt towards different objects. Although the weekly sessions have dedicated foci (e.g., self, difficult people), participants are encouraged to understand and work with their individual propensities. For

instance, they are encouraged to start with a good friend instead of oneself if that seems easier and then extend the intention from there. Ways of integrating the practice into everyday life are discussed (e.g., cultivating benevolence in the subway) and partner exercises are used to foster the transfer of the cultivated qualities into interpersonal situations.

Perspective

This module focuses on the cognitive aspects of compassion. Particularly, participants learn to take perspectives on thoughts, on their sense of self and on other people. In the case of thoughts, the perspective is one of witnessing without identification. This way of relating to thoughts creates “space” around the formation of a thought and reactions to the thought in the form of emotions, action tendencies or more thoughts. Participants also observe more macroscopic dynamics within themselves, that is, their inner “parts”, “roles” or “self-aspects”[8]. They try to cultivate a similar perspective on these parts as on thoughts, that is, not fully identifying with them and remaining aware of their transiency. Finally, the module aims at strengthening the ability of the participants to detach from their own perspective and take the perspectives of other people, trying to understand their thoughts, motives and feelings even when these are very different from their own.

The first core exercise in this module is a meditation called “observing thoughts”. The second is a partner exercise, in which one partner learns to switch between self parts, while the listener practices cognitive perspective taking on others, trying to identify from which of these parts the other is speaking.

Perspective Core Exercise 1: Observing Thoughts



During this practice, which is common in many contemplative traditions[13], [22], the meditator observes thoughts as mental events. This means looking at thoughts in similar ways as one would look at natural phenomena. The meditator can observe how an event comes up, lingers for a while and then dissipates or blends over into the next event. As part of this practice, participants use mental labels to classify the content of their thoughts to retain an observational, non-identified perspective on them. These may be labels such as “remembering”, “planning” or “judging”.

The objective of the practice is to de-identify from thoughts and get a metaperspective on them, thereby gaining insight into the workings of the mind, and greater flexibility with regard to reactive feelings and actions.

Perspective Core Exercise 2: Perspective Dyad



This is a partner exercise developed in the course of the ReSource Protocol development. It is based on the notion of the self as comprised of different parts or aspects, an idea common in many Western psychotherapeutic approaches[7], [8], [23] and related to the idea of the self as a non-unitary and constantly changing entity, common in contemplative philosophies[24].

The exercise is done in the weekly sessions and at home. In the sessions, two participants, say Anna and Bill, are paired and sit in front of each other. Anna tells Bill about an event of the day, first briefly describing the event and its setting as it has occurred to her and then retelling the event from the perspective of another inner part of her. This inner part is drawn by chance from a list of inner parts that Anna has identified previously in the course of the training (see outline below). In the narration of the event, she sticks to what has actually happened but interprets everything from the perspective of the allotted inner part, resulting in different thoughts, judgments, and emotions. Bill listens mindfully, without reacting verbally or non-verbally. He has the list of Anna's inner parts in front of him and tries to guess the perspective from which she is narrating. After 5 minutes of narration, there is a minute of silence. Anna lets go of the part she has been creeping into and tries to return to a state that can be termed "center" or "self"[8]. This state is not dominated by any of the parts but rather a space of non-judgmental acceptance of everything that is - including all inner parts - and is characterized by calm, balance, and a clear view. In this one minute, Bill also practices returning to his center or self. After this minute of silence, Bill communicates his guess and Anna reveals the perspective she has been telling from. Then, roles are reversed. When practiced during the week, participants do the exercise in pairs via a smartphone app, as described for the Affect core exercise 2 (see above).

The exercise is designed, on the speaker's side, to train the ability to detach from a certain interpretation of the situation and adopt an alternative one. Over the course of the training, this may result in an experiential insight into the non-unitary, impermanent and interdependent nature of the self. This may in turn lead to a more profound understanding of the self, as well as greater ease and flexibility in thoughts and emotions relating to it. The listener learns to take somebody else's perspective and understand their patterns of thoughts and emotions.

Outline of the Training

In the retreat, the core practices are introduced. They learn a first, easy variant of thought observation by means of mental labeling. The framework for the second core exercise is the Internal Family Systems[7], [8], a model of our inner world as a network of interrelated parts. Prototypical examples are the inner critic, the slave driver, the happy pig, the manager or the pleasing child. These archetypes are, however, only starting points for the participants to find their own individual parts that they commonly adopt. Using various methods of contemplation and exploratory artwork, participants discover a first set of inner parts during the retreat that may be changed, extended and elaborated in the course of the module. A group exercise brought into the protocol by Tom Holmes guides participants into the collective experience of multiple self-aspects that are present in every person and also into the state of calm and vivid spaciousness ("center" or "self") that can be found when identification with specific self-aspects is temporarily overcome.

In the 13-week course, participants refine their abilities of observing thoughts. They start off labeling their thoughts, thereby cultivating an observational, non-identified perspective on them. Later, they observe their coming and going (change or impermanence). Participants also work with their inner beliefs with the aim of understanding how these change over both historical and ontogenetic time. Over the course of the 13 weeks, participants thus deepen their insight into the workings of the mind and investigate the role that thinking plays in their lives.

In discussions, supported by motivation talks and the presentation of scientific positions and data, participants elaborate their understanding of what could be meant by “self”, while continuously approaching this question experientially in the dyadic exercise. A specific type of custom-designed partner exercise is used in various sessions to support participants in their abilities to take the perspective of other people (Theory of Mind), particularly strengthening this skill with regard to people for whom it is difficult, because they are very different from the participant in their backgrounds, values or beliefs.

Summary

In this chapter, we have presented the outline of a training program for the cultivation of compassion as a broader attitude to life. Cultivating such a compassionate way of being in the world requires the coming together of a number of skills, which can broadly be divided into three domains: Presence, Affect and Perspective. In the ReSource Training Program, different skills and capacities from these domains are cultivated in separate training modules, each of which stretches over 13 weeks, beginning with a three-day retreat.

More specifically, the presence module focuses on cultivating interoceptive awareness and attentional skills. The affect module focuses on opening the heart (increasing attitudes and feelings of loving-kindness, care and benevolence), acceptance of difficult emotions such as anger, fear or sadness, as well as increasing prosocial motivation and action. Finally, the perspective module focuses on the training of cognitive capacities such as metacognitive skills (observing the mind) and perspective taking on self and others. Each module makes use of two core exercises derived from traditional contemplative practice as well as Western psychology and psychotherapy, supported by additional practices in the weekly sessions, homework and suggestions for informal practice. Practice consists of both single practices (e.g., meditations) and interpersonal exercises. The entire training is secular in nature and due to its modularity lends itself well to research into the changes associated with the cultivation of specific aspects of compassion (e.g., cognitive vs. affective components). We are confident that the program will make compassion-related practices accessible to a wide audience and through its integration with research will offer insights into the ways that these practices can most beneficially be used to cultivate compassion.

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Box VI

Being with Dying

**Curriculum for the Professional Training
Program in Compassionate End-of-Life Care**

Joan
Halifax



Being with Dying – Curriculum for the Professional Training Program in Compassionate End-of-Life Care

“Helping, fixing and serving represent three different ways of seeing life. When you help you see life as weak. When you fix you see life as broken. When you serve, you see life as whole.”

Dr. Rachel Naomi Remen

Introduction

The Being with Dying Professional Training Program (BWD) in Compassionate End-of-Life Care (EOLC) encompasses ethical, spiritual, psychological, existential and social aspects of care of the dying. It includes mindful and compassionate approaches to end-of-life care, compassion-based ethics and communication strategies in EOLC, clinician self-care and contemplative interventions appropriate for clinicians/caregivers and dying people.

The program builds on reflective practices that can regulate attention and emotion, cultivate compassion, aid in the development of a meta-cognitive perspective, promote calm and resilience, reduce stress, and foster emotional balance, embodiment and compassion. The training also emphasizes basic neuroscience research in relation to the clinical, contemplative and conceptual content of the training (see also [chapter 10](#) in this volume).

The BWD faculty has learned in our decades of work in the end-of-life care field that cultivating stability of attention and affect enables clinicians to respond to others and themselves more compassionately and with greater clarity and ethical grounding. This is something that the training emphasizes through the progressive contemplative interventions that are taught during the course of the program.

These contemplative interventions mirror the Halifax A.B.I.D.E. Compassion Model (see [chapter 12](#) in the volume) in training clinicians in attention, prosocial affect, the cognitive dimensions of intention and insight, and embodiment. These features can prime compassion and increase the capacity of clinicians to presence and work skillfully with suffering. The training also concentrates on the G.R.A.C.E. intervention, a clinician/patient compassion-based approach, as a way to give clinicians an attentional, affective, cognitive and somatic base for interactions with their patients.

This eight-day residential program is structured to provide opportunities for participants to share insights with their peers as well as with the interdisciplinary team of facilitators that includes contemplative practitioners, clinicians and educators. It is a deep dive into values and behaviors and utilizes many learning modalities, including didactic teaching, self-directed learning, inquiry, creative processes and contemplative practices to enhance awareness of the importance of the inner life and professional responsibility. In the course of the training, there are frequent processes for participants to interact with each other in group debriefs, role playing, dyadic exercises and council practice.





Components of the BWD Training

The BWD training has four components that center respectively on the transformation of the clinician, the patient, the community and the institution.

Four Dimensions of Training in Compassionate End-of-Life Care

1. Transforming the Clinician/Caregiver

- o Clarifying the worldview, values, priorities, knowledge of the clinician
- o Introduction to contemplative interventions, including the neuroscience of attention, insight, compassion
- o Cultivating the development of moral sensitivity and compassion-based ethics
- o Teaching clinicians strategies supporting clinician well-being

2. Transforming the Patient

- o Exploring the relevance of patients' social, cultural, psycho-spiritual issues
- o Addressing issues of pain/suffering/total pain of patients
- o Explicating peri-death phenomena, including active dying and care of the body after death
- o Outlining dimensions of grief, including anticipatory, acute and chronic grief

3. Transforming the Community

- o Defining an approach to caregiving that is compassion-based
- o Giving strategies for compassionate communication around end-of-life issues
- o Fostering compassion-based inter-professional relationships and team development
- o Cultivating a whole community that includes the clinical team and all those in the network of the dying person

4. Transforming the Institution

- o Exploring ethical issues, processes and policies that affect the dying person
- o Developing strategies for implementing compassion-based care in clinician training
- o Outlining applications of compassion-based care, with a neuroscience rationale
- o Instituting research initiatives in compassion-based care

Faculty and Components of the BWD Training Program

The training is taught by a renowned inter-professional faculty team modeling six dimensions: collaboration, inclusiveness, respect, mutuality, compassion and requisite diversity.

The team includes: two contemplatives, from the Zen and Tibetan traditions (both of these contemplatives have a non-sectarian approach); two physicians: an oncologist who is a communications expert and a palliative care physician; two doctoral prepared nurses: one who

specializes in clinical ethics and pediatric palliative care and the other who specializes in hospice care and PNI research; two psychologists, one specializing in trauma and the other in palliative care; a chaplain specializing in end-of-life care; and a yoga teacher.

Six Core Contemplative Strategies Taught during the BWD Training

All participants are guided each morning through successive reflective practices. These are unpacked in the mid-morning session by skilled practitioners, and the group explores how to apply the practices in their clinical work. Other practices are introduced in the course of the day. In the late afternoon, there is another hour devoted to a non-sectarian mindfulness practice. In the evening session, as well as during short periods throughout the day, stretching, yoga and other embodiment practices are taught.

The practices that are taught fall into six categories:

1. Focused attention and concentration practices with an emphasis on equanimity and compassion, including mindfulness of breath, somatic awareness, body scan, walking meditation, yoga, stretching, *qigong*.
2. Cultivating investigative/discernment faculty that includes insight practices focusing on values and ethics, altruism, pain, suffering, death, priorities and the development of metacognitive capacities; these include insight meditation, Nine Contemplations, contemplation of priorities, writing practice on death, *sandtray* practice.
3. Presencing pain/suffering and practicing deep listening, including learning not to personalize or pity/console; practices include seeing purely/bearing witness, co-meditation, council practice.
4. Cultivating prosocial mental qualities, including altruism, empathy, kindness, compassion, sympathetic joy, equanimity; practices include the G.R.A.C.E. intervention, the Boundless Abodes (*Brahmaviharas*), sending and receiving (*tonglen*), exchanging self with other.
5. Subjective familiarization with psycho-physical aspects of sickness, dying and death and practices utilizing visualization and imagination; practices include the practice of the dissolution of the psychophysical elements in the process of dying, dissolution of the body after death.
6. Open presence and the practice of panoramic, receptive, non-judgmental attention; the key practice is choiceless awareness.



Curriculum Components Covered by the BWD Training

The design of the training builds logically from one day to the next, with the training initiated by a deep exploration of values and ethics:

Day 1: The training opens with an orientation session that gives a summary of the program

Day 2: An exploration of the role of worldview, values and ethics in compassion-based care

Day 3: An exploration of the role of attention, insight and embodiment in compassion-based care

Day 4: Role play and exploration of prosocial communication

Day 5: The A.B.I.D.E. model of compassion is explicated in detail

Day 6: Unpacks issues around death, including peri-death phenomena, as well as ethical discernment and action in care of the dying

Day 7: Exploration of grief in the morning; in the afternoon, an exploration of applications of compassion-based care in clinical settings

Day 8: The training concludes with a summary of the training



Details of the Curriculum Components

Day 1: ORIENTATION (Education hours 2.5)

Late-afternoon session: Reflective practice: Intention, focused attention

Evening session: Orientation

Introduction to CEOLC, council: What will serve you in this training?

Day 2: VIEWS, VALUES, ETHICS (Education hours 8.5)

Yoga

Early-morning session: Reflective practice: Focused attention: Emphasizing the relationship between equanimity and compassion

Morning session: View, values

Debrief: Focused attention

Yoga

PPT: CEOLC theory, rationale: Six edge states, four benefits of reflective practices

Compassion and G.R.A.C.E. models

Inquiry practice: Attitudes toward dying: View, values related to dying

Afternoon session: Ethics

Ethical base of BWD: Moral ground, moral sensitivity

Exploring ethical foundation of moral ground in care of the dying

Reflective practice: Mindfulness practice

Evening session: Day's summary

Practices for building resilience



Day 3: ATTENTION, INSIGHT, EMBODIMENT (Education hours 8.5)

Yoga

Early-morning session: Reflective practice: Insight practice on inevitability of death

Morning session: Attention, insight

Debrief: Inquiry practice (Nine Contemplations)

PPT: Neuroscience of focused attention: Executive function, attentional blink, mind wandering

Yoga

Reflective practice: Presencing suffering

Afternoon session: Somatic approach to BWD

Somatic approach to working with the challenges of CEOLC

Reflective practice: Mindfulness practice

Evening session: Day's summary

Body scan

Day 4: PROSOCIAL COMMUNICATION (Education hours 8.5)

Yoga

Early-morning session: Reflective practice: Boundless Abodes; prosociality

Morning session: Communication: Exploring the G.R.A.C.E. model

Debrief: Prosocial mental states

G.R.A.C.E. model in communication: Role play

Yoga

Afternoon session: Communication: Compassion

PPT: Empathy, compassion, self-regulation: Application of Batson, Eisenberg

Compassion-based communication (G.R.A.C.E.): Role play

Reflective practice: Mindfulness practice

Evening session: Day's summary

Somatic practices for clinician self-care

Day 5: COMPASSION (Education hours 8.5)

Yoga

Early-morning session: Reflective practice: Compassion and transforming suffering

Morning session: Compassion

Debrief: Compassion practice (*tonglen*)

Exploring role of interoceptivity in empathy/compassion:

Reflective practice: Interoceptivity practice: Pulse, breath

Yoga

PPT: Neuroscience of empathy and compassion

Afternoon session: Pain/suffering

Exploring pain/suffering

Councils: When pain/suffering is unrelieved

Reflective practice: Mindfulness practice

Evening session: Day's summary

Compassion exploration

Day 6: PERI-DEATH, ETHICS (Education hours 7.0)

Yoga

Early-morning session: Reflective practice: Exploring dying

Morning session: Peri-death

Debrief: Dissolution of the body

Yoga

Exploring peri-death issues

Councils: How do you mark the death of a patient?

Afternoon session: Ethics

Ethical issues at the end of life: Ethical discernment, reasoning, action

Walking reflective practice

Public talk: Being with dying talk, with core faculty

Evening session: Summary of day's proceedings

Reflective practice: Sympathetic joy

Day 7: GRIEF, APPLICATIONS (Education hours 8.5)

Yoga

Early-morning session: Reflective practice: Contemplating priorities

Morning session: Grief

Debrief: Contemplating priorities reflective practice

Yoga

Councils: Exploring grief: Patients, clinicians, family

Afternoon session topics: Application of training in institutional settings

Exploring applications: Using the four transformative areas of clinician, patient, community, institution

Reflective practice: Mindfulness practice

Evening session: Councils: Completions and commitments

Day 8: CONCLUSION: (EDUCATION HOURS 2.0)

Yoga

Early-morning session: Reflective practice: Open presence

Morning session: Large group council and concluding ritual, collecting evaluations, giving certificates.



The G.R.A.C.E. Intervention

THE G.R.A.C.E. intervention was created as a key technique to help clinicians develop a way to foster compassion in the process of caring for their patients. It is included here as an example of a core contemplative intervention used in the BWD training.

The first version of the G.R.A.C.E. process was developed for clinicians in the end-of-life care field during a program I was teaching at a state hospice. Since that time, the G.R.A.C.E. intervention has been applied by clinicians, therapists, chaplains and social workers as a means to engender compassion as they engage in clinician/patient interactions. The G.R.A.C.E. approach is based on the Halifax A.B.I.D.E. Model of Compassion (see [Chapter 12](#) in this volume). G.R.A.C.E. is a mnemonic device that can aid a clinician in remembering the steps to cultivate compassion, as he

or she is in an interaction with a patient. The acronym G.R.A.C.E. refers to gathering attention; recalling intention; attunement to self and other; considering what will truly serve the patient; and finally, ethically engaging, enacting, and ending the interaction.



-
1. Gathering attention: A/A Axis: Attentional Domain; focus, grounding, balance
 2. Recalling intention: A/A Axis, I/I Axis: Affective/Cognitive Domain: the resource of motivation
 3. Attuning to self/other: A/A Axis: Affective Domain: resonance
 4. Considering: I/I Axis: Cognitive Domain: insight/discernment: what will serve
 5. Engaging: E/E Axis: Somatic Domain: ethical enactment, ending

The reason that I developed this short intervention is that clinicians often need a direct, simple and efficient way to remember to open to their patient's experience and to keep grounded as they presence the suffering of others (and themselves), and they endeavor to find a compassionate path through complex clinical situations.



In the script that follows, my clinical colleagues, Dr. Tony Back, a medical oncologist and communications specialist, Dr. Cynda Rushton, Professor of Nursing and Clinical Ethicist at Johns Hopkins University, and I created a text that endeavors to guide a clinician into priming compassion as they encounter a patient. The text is a guide for clinicians in bringing forward the elements of the compassion model described above. The text can be modified as appropriate to each individual and each situation.

Setting the Stage for Compassion in the Clinical Encounter (Halifax/Back/Rushton):

1. Gather your attention:

Pause, breathe in, give yourself time to get grounded. Invite yourself to be present and embodied, by sensing into a place of stability in your body. You can focus your attention on the breath, for example, or on a neutral part of the body, like the soles of your feet or your hands as they rest on each other. You can use this moment of grounding to interrupt your assumptions and expectations. (A/A Axis: Attention)

2. Recall your intention:

Remember what your service to the patient is really about: to relieve the individual's suffering and to act with integrity and preserve the integrity of the other.

Recall the felt sense of why you have chosen to relieve the suffering of others and to serve in this way. This "touch in" can happen in any moment. Your motivation keeps you on track, morally grounded and connected to the patient and to your highest values. (A/A, I/I Axis: Affect, Intention)

3. Attune by checking in with yourself, then the patient:

First notice what's going on in your own mind and body. Then sense into the experience of your patient; sense into what the patient is saying, especially emotional cues: voice tone, body language. This is sense without judgment and an active process of inquiry, first involving yourself, then the patient. Open a space in which the encounter can unfold, in which you are present for whatever may arise, in yourself and in your patient. How you notice the patient, how you acknowledge your patient, how your patient notices you and acknowledges you, all constitute a kind of mutual exchange. The richer you make this mutual exchange, the more there is the capacity for unfolding. (A/A Axis: Affect)

4. Consider what will really serve your patient by being truly present with your patient and letting insights arise.

As the encounter with the patient unfolds, notice what the patient might be offering in this moment. What are you sensing, seeing, learning? Ask yourself: What will really serve here? Draw on your expertise, knowledge and experience, and at the same time, be open to seeing things in a fresh way. This is a diagnostic step; also, the insights you have may fall outside of a medical category. Don't jump to conclusions too quickly. (I/I Axis: Insight)

5. Engage, enact ethically and then end the interaction: allow for emergence of the next step. (E/E Axis)

Part 1:

Engage and enact: Compassionate action emerges from the sense of openness, connectedness and discernment you have created. This action might be a recommendation, an open question about values, or even a proposal for how to spend the remaining time with this patient. You co-create with the patient a dynamic, morally grounded situation, characterized by mutuality, trust and consistent with your values and ethics; you draw on your professional expertise, intuition and insight, and you look for common ground consistent with your values and supportive of mutual integrity. (E/E Axis: Ethical Enactment)

What emerges is principled compassion: mutual, respectful of all persons involved, as well as practical and actionable. These aspirations may not always be realized; there may be deeply

rooted conflicts in goals and values that must be addressed from this place of stability and discernment.

Part 2:

End: Mark the end of the interaction with your patient; release, let go, breathe out. Explicitly recognize internally when the encounter is over, so that you can move cleanly to the next patient or task; this recognition can be marked by attention to your out-breath. While the next step might be more than you expected would be possible or disappointingly small, notice that, acknowledge your work. Without acknowledging your own work, it will be difficult to let go of this encounter and move on. (E/E Axis: Ending)

Conclusion

The BWD training was initiated by the author of this chapter in 1996 in response to requests by a number of clinicians to be introduced to contemplative and compassionate approaches to end-of-life care. The training was originally funded by the Nathan Cummings Foundation and the George Soros Project on Death in America. As the training developed over the years, dedicated and skilled clinicians in the training became interns in the program, and then some moved into faculty positions. From there, several have become core faculty in the training and have made important contributions to the development of the curriculum. All of the current faculty in the BWD training were former participants in the program, and have established BWD training elements in their home institutions. A number of the faculty have collaborated on journal papers and are moving BWD work into the mainstream through teaching, research and writing. As of 2012, more than forty individuals from the University of Virginia Nursing and Medical Schools have been through the program. Groups of clinicians have been sent from Rockford Health Services, Duke University, San Diego Hospice, Johns Hopkins University, Zen Hospice, Maui Hospice and various other institutions.

The training is entering a new phase with the publication of the G.R.A.C.E intervention and Halifax A.B.I.D.E. Compassion Model, with research monies being now available to assess the efficacy of the training and its various interventions. In addition, the core and associate faculty are developing new curricula to translate the training into all medical and nursing disciplines.

Acknowledgements

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Box VII

A Practical Guide to Classic Buddhist Meditation

Diego
Hangartner



A Practical Guide to Classic Buddhist Meditation

Why Meditate?

The main purpose of mental practice is to transform the mind and develop its positive qualities, and to reduce the negative propensities and activities that emerge from an untrained mind. Sitting meditation is one form of mental training, but is by no means the only method to achieve this transformation; however, sitting meditation offers a more grounded and less distracted approach, comparable to a laboratory where external disruptions are somewhat reduced.

The Buddhist tradition, in particular, has developed an infinite set of methods and practices directed at cultivating the mind. What follows is only a rough sketch of the main meditation concepts, categories and techniques. Although there are countless methods and classifications with a very wide range of exercises, there are two axioms on which Buddhist practices are based. They are formulated in the Abhidharma literature as follows: 1) it is possible to eliminate suffering and its causes and 2) any effective method to relieve suffering must involve changes in one's cognitive and emotional states, since the root causes of suffering are correctable defects in one's mental disposition.

A spiritual education and development means a transformation of attitude, and meditation is considered such a procedure. In doing so we reduce counterproductive attitudes and adjust our thoughts in a beneficial way. Of course, such transformation needs repeated practice and familiarization, and neither talking about it, nor just wishful thinking, will be helpful and bring any results. The Tibetan term for meditation, *gom*, literally means familiarization (the equivalent term in Sanskrit, *bhavana*, means cultivation), and meditation is therefore understood to be the cultivation of positive mental qualities through a process of familiarization.

In principle there are two kinds of meditation practices: *Śamatha* (Shamatha: Calm Abiding) and *Vipaśyanā* (Vipassana: Insight). With *Śamatha* practices the mind is made calm and stable, while during *Vipaśyanā* practices the calmed mind is used to cultivate insights that will affect one's view and counter delusions.

Śamatha can be translated as Calm Abiding or Meditative Quiescence. *Śamatha* is not just one particular practice but many types of practices that work at refining our attention. Attention refining practices are not unique to Buddhism, as they can be found in non-Buddhist traditions as well. While it is, in fact, a practice that is essential to all traditions and systems that aim at improving attention and fostering a stable mind, in the Buddhist context *Śamatha* is one of the foundations to achieve ultimate awakening and is embedded in the larger context of ethical disciplines as well. In order to attain a completely stable state of one's mind, the *Śamatha* literature speaks of many favorable conditions and circumstances that need to come together. Since the mind is in a constant state of movement, bringing the mind to focus and at the same time being clear and lucid can at times seem an impossible feat. Without proper preparation and without a supporting context, *Śamatha* practices will not lead to their intended outcome of stable clarity. This is why one first needs to eliminate unfavorable acts and circumstances that are caused by and sustain detrimental imprints. Second, one must develop and engage in positive acts and create circumstances that sustain favorable imprints. Third, one needs to engage in the actual practice by

sustaining focus on the chosen object.

The practice begins by setting the intention or motivation, clarifying the direction and purpose of one's engagement. It is comparable to setting the goal and direction at the beginning of a journey. In the Buddhist context such practices are not solely for one's personal accomplishments, but for the welfare of all beings.

All systems and categorizations agree that after developing a positive motivation you first need to train attention. This can be done by focusing on an external object (for example a candle or an image), an internal object (thoughts), or something in-between the two extremes of outside and inside, such as the breath. Traditionally the breath is preferred, because it serves as an ideal basis for reference and observation, and is readily available. There are countless methods and techniques on how to follow and observe the breath. By observing the chosen object (such as the breath), one primarily becomes aware of how busy the mind is.

By using mindfulness, vigilant introspection and carefulness to guide the mind, you then continuously bring your attention back to the object of focus. While there are various definitions of mindfulness and vigilant introspection, it is useful to think of mindfulness as never forgetting what is to be done, and what is not to be done; of vigilant introspection as examining one's conduct in thought, word and deed constantly; and of carefulness as an attentive and responsible implementation of the principle of what to adopt and what to reject.

Through these efforts one's mind will become more stable, clear, peaceful and workable. Once the mind is calm and unwavering, the focused and clear mind can be used to investigate the mind's own processes, like a microscope for the scientist. This method of calming the mind is the first part of *Śamatha* practice, of Calm Abiding. Following that, one will be able to develop the mind's positive qualities much more effectively.

The Tibetan tradition introduces another dyad of categorizing meditation: analytical and stabilized meditation. During analytical meditation the meditator investigates multiple aspects of a chosen object and of one's assumptions, while during stabilized meditation the meditator single-pointedly fixes his or her mind on an object without examining the aspects of the object analytically.

Once the mind is gradually familiarized with the practices, positive qualities such as compassion have a firm foundation and can be developed even further. With respect to the scope and aims of the practices, Tibetan Buddhism postulates two traditions: the vehicle of the *Sravakas* and *Pratyeka*-Buddhas (Hinayana Buddhism) and of the Bodhisattvas (Mahayana Buddhism). While in the Hinayana tradition the main purpose is to still and overcome one's afflictive emotions, the aspiration of developing positive qualities of Mahayana Buddhism culminates in Bodhicitta – the intention to achieve Buddhahood and freedom from suffering for the sake of all beings.

With regard to the progression of developing compassion, there are two critical stages. The first is to feel empathy and to resonate with the other (suffering) being, and the second is to develop a wish to relieve that suffering.

It is not enough to solely resonate with suffering. There is a danger of getting stuck in resonating alone and one can become despondent. This is not beneficial for anybody – neither for you, nor for anyone else. It is essential for the next level to follow, which is to move beyond resonating with the suffering and to actually want to relieve that suffering, and its causes, on several levels. It could be the alleviation of the actual situation, or, if one can, removing the causes that led to the suffering in the first place; this is true of personal suffering as well as that of others.

Depending on the situation and the circumstances, however, we may lack the skills to properly address the condition. Since there are many degrees of suffering and respective causes, there are, accordingly, various ways to alleviate them. In the context of this short essay we will refrain from exploring remedies further since either the Buddhist source texts or, for illness, medical treatises are more insightful.

How to Develop Compassion

In order to develop compassion we need to include all beings. Including all beings, however, does not come spontaneously; we are predominantly concerned with ourselves and with our personal well-being. For compassion to flourish it has to be felt for all conscious beings, not only for ourselves. Consequently, one needs to shift from self-centered to other-centered, because, as we have seen from the Buddhist view, a self-centered attitude is the main source of our suffering.

The first and most critical step in developing compassion is to cultivate equanimity, or impartiality. As mentioned earlier, it is important to understand that impartiality is not indifference, because indifference is the attitude of “I don’t care how you feel, nor what your situation is – I am busy with my own circumstances”. Equanimity is expressed in a shift of perspective, which is based on the insight of “Just as I want to have happiness, I know that you too want to have happiness”. By accepting that not only our self wants happiness, but every being equally wants happiness, we break through the veil of self-centeredness and separation. While reaching a stable degree of impartiality may be difficult at the beginning, it can be developed gradually.

When practicing compassion, we include and work with people with whom we have different types of relationships: friends, family members, neutral acquaintances and enemies. To include the category of people called enemies into our practice can be challenging. Whenever we think of people as enemies, we think of those who threaten our inner balance, our self-contained peace. We normally think of the adversary as somebody that is out to get us. To give our loving-kindness and compassion to somebody perceived in this way is obviously more difficult. It is therefore advisable to start with a smaller annoyance: start, for example, with somebody that you have a good relationship with. However, as you certainly know, even a person you care for can sometimes really trigger you. Look at that. What is it that is annoying you? At that very moment you perceive this person – to whom you normally feel close – as being the enemy of your inner balance. He or she disturbs your well-being. What can you do when this happens? First you need to become aware of the mental process, and when it is happening it is critical to realize where you are in the unfolding of your emotions; are you at the beginning of the process, just when a little spark has set you off? Or do you catch yourself in the middle of an angry defense? Or do you come back to clarity only when it is all over, and you feel calm again?

Whenever you become aware of this mental shift, and of your response, apply patience. Forbearance is the direct antidote to anger, and by applying patience, if necessary repeatedly, clarity will gradually reemerge in your mind. Of course this is easier said than done, but without training it will never be easy. This is the reason why, in many of the practices, we mentally exercise different situations, so that, in the middle of an actual event, we become aware of what is happening and recall the appropriate response. With training we can gradually cope with more difficult situations.

During compassion and loving-kindness training, one typically proceeds through a number of stages that differ in the focus of the exercise, and also proceed from easier to more challenging types of meditation. As the level of difficulty progresses this can, for example, include practices that





1) focus on self, 2) focus on a good friend, 3) focus on a neutral person, 4) focus on a difficult person, 5) focus on the self, good friend, neutral person and difficult person, and, eventually, 6) focus on the entire universe.

Six-Step Process

For actually cultivating compassion, and following the theoretical framework presented above, the following six steps to developing compassion will be discussed. This six-step process can be used in every meditation session and also be applied outside of an actual meditation session:

1. Foundational step of equanimity: Realizing that everyone wants happiness and does not want suffering
2. Meditating on everyone as close, using your best friend, or mother, as the model
3. Reflecting on the kindness of individuals, intended and unintended
4. Developing a determination to reciprocate kindness
5. Meditating on three levels of loving-kindness (friend, neutral, enemy)
6. Overview of the three levels of compassion, as well as enhancement by wisdom: compassion towards three levels of suffering, compassion towards impermanence and insubstantiality, compassion seeing empty beings

1.

As mentioned, the initial step is developing equanimity. Compassion begins with the realization that every being, be they human or animal, wants happiness and does not want suffering. It is striking to hear His Holiness the Dalai Lama, who is respected all over the world as the embodiment of compassion and wisdom, say that his basic attitude when engaging with anybody is: "Everybody is my friend; I approach them as my friend, because I understand that they want happiness". There is a fundamental and radical truth in this. When we think about it, there is nobody that gets up in the morning and wishes: "Today, I'm really going to have a miserable day". In this sense we are all the same, regardless of race, nationality, gender, religious belief or educational background. Focusing on this similarity, which all beings have with you, and you with them, will be a solid foundation for compassion.

2.

After that you then gradually meditate on beings that you feel close to. You can use your best friend or your mother. Although many people in the West find this too challenging, in the Tibetan context the mother is considered the embodiment of kindness and compassion. So depending on your relationship with family members it may be better to start with your best friend and then use that feeling as the model. Consider and experience how you wish for that being to be happy and free of suffering.

3.

Next reflect on the kindness of these individuals. Their kindness may be intended, but maybe not. Gradually expand that sense of gratitude to other people that have been kind to you, but with whom you are less familiar: somebody who has provided you with food; a bus driver who has waited and opened the door for you; somebody who helped you lift your heavy luggage. You may not have realized it at the time, but these are acts of kindness.

4.

After this reflection on kindness, you begin to see that many have contributed to your well-being and given you moments of happiness. You then develop gratitude and a wish to reciprocate

kindness. You slowly determine to reciprocate kindness that is shown to you, and take on the responsibility to engage in random acts of kindness yourself.

5.

After these first four steps of priming your mind with a sense of benevolence, you can begin to meditate on the three levels of loving-kindness towards friends, neutral people and, later on, towards enemies.

First work with friends; extend to them your wish that they may be happy and free from suffering. Then work with people that are neutral to you, and only when you feel ready, begin to do the practices with those who you feel are enemies, the people that are really causing you trouble.

6.

After these easier and more straightforward practices, one can follow with three deeper levels of compassion. As understood in the Tibetan Buddhist tradition, there are three levels related to different degrees of compassion, and all are enhanced by wisdom.

The first level of compassion is directed towards the three levels of suffering: the suffering of suffering, the suffering of change and all-pervasive suffering. Every form of the three sufferings can elicit compassion (for discussion see [chapter 8](#) in this volume).

Why is it that people can't stay happy? Once you understand that everybody has all three kinds of suffering, a gradual understanding of the truth of impermanence emerges. There is nothing that is constant, permanent, substantially true, unchanging – everything is in constant flux and moving. Our body is impermanent and constantly changing, and so are our surroundings. It is only on the surface that things appear to be solid and stable, but reality is different. Because we do not see reality as it is and do not accept it, this delusion causes us suffering and dissatisfaction. This insight is the source for the second level of compassion, which is compassion towards impermanence.

When this compassion towards impermanence is developed and becomes more stable, then compassion can gradually grow to see that nothing is independent and inherently existent. All beings are constantly going through transitions and are not lasting. Not only are they changing, but everything around them is constantly changing too. Even the relations that you have with them go through shifts. This is what is meant by being empty of inherent existence and accordingly develops compassion towards seeing beings as empty of inherent existence.

Through these three levels of compassion you immerse yourself deeper into meditation; they themselves serve as a guideline for Mahayana Buddhist practice.



Diego Hangartner
"Loving-Kindness (Metta) Meditation"

0:17 min

Practical Examples of Meditations

We influence and condition our mind through our daily activities, but intentionally training our

habituated mind in a specific way does not come easy. As with everything, be it learning how to read and write, ride a bicycle or play a musical instrument, we need to begin with the foundations first and train in those basic skills. Only then can we attempt the more difficult and complex endeavors. This is no less true for training the mind and developing its positive skills.

There are many varieties of meditation practices. For the purpose of meditating on compassion, here are a few core practices:

1. Experiencing Compassion in Oneself

Begin by recalling the three kinds of suffering and the Four Immeasurables (see [chapter 8](#) in this volume) . What are they? After spending some time recollecting the meaning of loving-kindness, compassion, joy and impartiality, focus your attention on the breath and stabilize the mind. See if you can follow 21 cycles of breathing without distraction. Once the mind is more stable and clear, imagine that one of your dearest friends or family members is in front of you. See him or her in a happy mindset. Now imagine how something troubles him or her: it could be an injury, a deadly sickness or being viciously tortured. Notice how your heart goes out to him or her and how you wish for that person to be free from suffering. Don't move on in your mind, and don't avoid that feeling – just hold that sense of how you want that person to be free of suffering. Become deeply aware how unbearable it is for you to see that person in distress, and how your intention to help increases. Feel how this situation is uncomfortable for yourself. This response is natural. It shows your innate compassion and that you have the potential to develop it.

Now move on to somebody that is not so familiar, but nevertheless an acquaintance, and repeat the same process. Visualize how he or she is in distress, is suffering badly. The suffering you see in the other is something intolerable and you want to remedy it. Cultivate this sense of “wanting to relieve that being from suffering and the causes of suffering”.

Repeat this exercise time and again; it will cultivate your mental determination, response, strength and stability. Once you feel stable in this practice, you can then proceed to neutral individuals, the people that you don't know personally, and eventually, more difficult, even to enemies. Don't try this at the beginning since it will not work – but rest assured that by training in the first part, using friends and neutral people, you will also be able to do so for those you perceive as your enemies.

2. Exchanging Oneself for Others

This exercise is a bit more challenging and is in two parts.

A)

The first practice is called giving away your own happiness using the instrument of loving-kindness: Go through the same process of visualizing people in front of you. Again, begin with friends and loved ones. When you see them suffering think from the depths of your heart: “I will give to this dear friend, without hesitation, whatever virtues, or goodness, I have accumulated, so that it will benefit him or her”.

This exercise can be alternated with the practice called taking the suffering of others within yourself using the instrument of compassion: After going through the process of visualizing your friends, or dear ones, and seeing them suffering, you think from the depths of your heart: “I will give to this dear friend, without hesitation, whatever virtues I have accumulated, and may his or her suffering, together with its causes, ripen within me”.

You can do these exercises either by merely thinking, or you can reinforce this practice by adding a visualization: when you inhale, imagine that their negativity and sufferings enter your heart as black soot, or smoke, and when you exhale white light shines from your heart and touches those beings in distress, removing all their sufferings. Do that for each cycle of breath, and by gradually increasing the spectrum of people in front of you, eventually include those you feel neutral toward, and then enemies.

B)

These first two meditations address the sense of separation by reaching out to them with your own well-being. Shantideva, however, in his “The Way of the Bodhisattva”, suggests an additional set of practices based on exchanging oneself and others. They focus on something of particular importance, which is developing antidotes to pride, competitiveness and jealousy. Arrogance, rivalry and envy are considered among the main causes of problems and sufferings, and are a major hindrance to developing genuine compassion. Furthermore, pride, rivalry and envy often follow in the wake of any positive mindset – such as compassion – and can directly destroy the beneficial qualities of altruism and benevolence. Shantideva recommends these practices to develop antidotes that will counteract those mental toxins.

When performing this meditation of exchange, think of people that you consider either being inferior, equal or superior to you. Towards the people that you feel are inferior to you, you most probably have pride; towards the ones you consider above yourself, or that have more, you may feel envious. In this exercise you meditate on exchanging yourself with them.

Imagine, for example, being somebody that is jealous of you. Put yourself in their position. Feel the person's envy. Feel how they must be struggling with their jealousy, how they are besieged with that wretched feeling. From that position of being jealous, look at your former self, with all the great qualities and possessions, but also imbued with arrogance and pride. Seeing yourself as that haughty person will help you to realize how wrong it is to be arrogant, and contemptuous, towards others; this will decrease your pride.

Again do this meditation by exchanging yourself with somebody that you feel is equal to you. See how it must feel for that person when you, as your normal self, are in a state of competition and rivalry. Experience how this does not feel pleasant. Once you realize this, it will decrease your urge to feel superior to the other. For the third group of people, meditate on exchanging position, by using a person you consider above you, and who is very proud and arrogant. Go through the same process again. Look at your usual self in a jealous and envious frame of mind. From such a shift in perspective, you will see how futile and meaningless your behavior is, and it will decrease your own jealousy.

Meditating on all three constellations will cultivate a view that is detached from your normal self-clinging, and will develop insight and compassion (see also [chapter 9](#) in this volume). These practices are very helpful, particularly in difficult situations that we all certainly encounter. When feeling proud, tending towards rivalry, or with envy, recalling these meditations will serve as antidotes. They will rid us of these defilements that only cause suffering – in us and in others.

3. A Meditation on Developing Equanimity

Imagine yourself to be sitting between two groups of people. You, in the center, are calm, balanced, your reasonable self. Looking to your right you see another version of yourself, imbued with your self-clinging attitude, full of pride and not considering others. To your left, visualize a small group of people that are destitute, in pain and without recourse to helping, money or shelter. You, in the middle, are an unbiased, sensible person. Consider that those people on both sides of

you want happiness and want to be free of misery. In this way they are the same. But now think: the selfish person to the right is only one person, but the people to the left are many more – which side is more important? The selfish me or the helpless many? As the unbiased person in the middle, you will naturally favor the greater number of suffering people.

By repeatedly going through these three foundational practices, together with other methods for developing the mind (such as *Śamatha* and *Vipaśyanā*), compassion, mental balance and a stronger and happier heart for your daily activities will develop.

How to Act and to Lead One's Conduct

Following these sheltered meditation practices we encounter the genuine test: how do we engage in the so-called real and busy world? After all, this is where we spend most of our conscious time. It is here where we encounter infinite distractions, triggers for attachment and aversion, where we meet people to whom we feel attracted, neutral towards, or we dislike, and meet all the other myriad challenges.

To protect us against those interferences and lead a more fulfilling life, the Mahayana Buddhist tradition teaches six behavioral principles. They are summed up in the six perfections and constitute advice on how to guide one's conduct in everyday life. These six perfections, or paramitas, are: generosity, discipline, patience, effort, concentration and wisdom (see [chapter 9](#) in this volume). They are called perfections because by properly engaging in these activities, one's mind becomes clearer, the causes of disturbances are diminished and one is able to perfect one's potential for well-being. These activities are to be applied step by step and according to one's capabilities. They comprise the heart of the Mahayana Buddhist practice and are considered the foundation of a meaningful and happy life. Because of the immense importance of engaging in proper conduct, the main inspiration and guide for developing compassion within the Tibetan Buddhist tradition, Shantideva's *Engaging in the Conduct of a Bodhisattva*, is structured along these six perfections.

Developing compassion is obviously not something that can be done once and then we have learned it, and it will stay present within our minds. We need to mindfully recollect and actively develop it over and over again. This is also why the stages and marks of compassion development need to be repeatedly heard, studied and contemplated. Only then will we be able to develop a mindset that is based on wisdom and compassion, and engage in corresponding conduct. If, in the middle of our normal life, often filled with mindless activities, we can remember compassion, it will give us a sense of serenity and will, at the same time, be a cause of less suffering and a source of more mental balance.

To quote His Holiness the Dalai Lama, "Compassion diminishes fears about your own pain and increases your inner strength. Compassion strengthens your outlook, and with that courage you become more relaxed. Compassion is a priceless jewel".

Compassion is not about being soft and weak, nor is it about giving in and just accepting when others are acting wrongly, or when they are taking advantage of you or somebody else. It is important to act and, when necessary, even strongly, but always with compassion and respect. However, if compassion is not complemented with a faculty of intelligence, or insight, then there is a danger of compassion turning into foolish states. Although it is not easy to react adequately when somebody is mean or nasty, it is very important to respond to the circumstance with a clear head and a compassionate heart. Anger, the normal response mechanism to injustice or threat, will only create more difficulties. The Dalai Lama often says, "If you are selfish, be wisely selfish". Ordinary

selfishness focuses only on your own needs, but if you are wisely selfish, you will treat everyone just as well as you treat those close to you. This strategy will produce more satisfaction for you, and more happiness.

According to His Holiness the Dalai Lama, the practice of compassion and of training the mind can be summed up in two sentences: “If you are able, you should help others. If you are not able, you should at least not harm others”. First, you must gain control over the tendency to do harm, voluntarily restraining your hurtful physical and verbal actions. The next level begins when you can bring these destructive factors somewhat under your control, giving yourself a better chance to help others. “This is my religion: no need for temples... or complicated philosophy,... [just] simple kindness”.

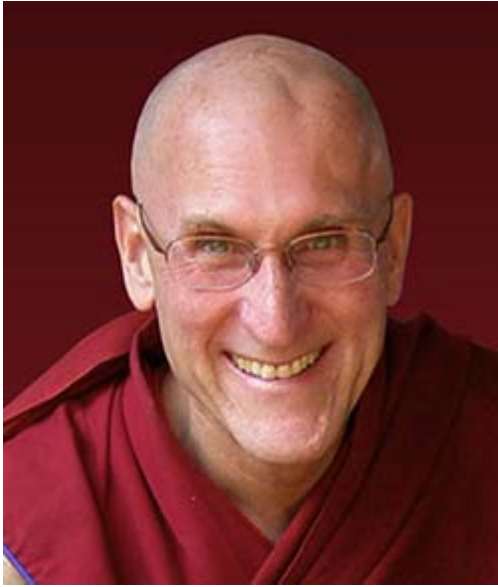
Shantideva, in his treatise “Engaging in the Conduct of a Bodhisattva”, expressed the quintessence of why, and how, to train compassion in one verse:

“All the joy the world contains has come through wishing happiness for others.

All the misery the world contains has come through wanting pleasure for oneself.”

Curriculum vitae

Barry Kerzin



Barry received his BA degree in Philosophy from UC Berkeley, received an MD degree from USC, completed a residency in Family Practice, was an Assistant Professor of Family Medicine at the University of Washington, and a Visiting Professor at the Central University of Tibetan Studies in Varanasi, India. He resides 24 years in Dharamsala serving as a doctor to HH Dalai Lama, and provides charitable medical care to the poor. Having done many meditation retreats including a three-year retreat, his brain was studied as part of research on long-term meditators at the University of Wisconsin, Madison, and Princeton University. He was ordained as a Buddhist monk by HH Dalai Lama and continues to be a Diplomate in the American Board of Family Medicine and a Fellow in the American Academy of Family Practice. He is faculty at the Mind and Life Institute and consults for the Max Planck Institute Leipzig's research on training compassion. Both the founder and chairman of the Human Values Institute in Japan, he teaches compassion and secular ethics in medical schools and universities around the world including a TEDx talk on happiness. He has authored several books.

Bethany E. Kok



Bethany was a William R. Kenan Graduate Fellow at the University of North Carolina at Chapel Hill before accepting a postdoctoral fellowship at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig. She received both the inaugural Christopher R. Agnew Research Innovation Award and the Outstanding Research Award from the Society for Personality and Social Psychology in 2010 for her article on the reciprocal relationships between social connectedness, positive emotions and autonomic regulation as expressed in change over time, which was later published in *Biological Psychology*. Her interdisciplinary research addresses social bonds as a regulatory mechanism of the parasympathetic nervous system.

Boris Bornemann



Boris is a Ph.D. Student at the Department of Social Neuroscience of the Max Planck Institute for Human Cognitive and Brain Science in Leipzig, under the supervision of Prof. Dr. Tania Singer. He has worked on the conceptual bases and the intervention protocol of the ReSource Project, a large scale study on the effects of contemplative practice. He received his Diploma in Psychology from Humboldt-University in Berlin and has been working at the Department of Cognitive Psychology under the supervision of Prof. Dr. Elke van der Meer from 2007 to 2009. In 2009, he worked as a Research Assistant with Prof. Dr. Piotr Winkielman at the University of California in San Diego. Boris prior research has focused on cognitive efficiency, emotions, and consciousness.

Brendan Ozawa de Silva



Brendan is an Associate Professor of Psychology at Life University in Marietta, Georgia, USA. He received his doctorate in Modern History from Oxford University in 2003, an M.Phil. from Oxford University in Russian and East European Studies, and a Master of Theological Studies from Boston University. From 2003 to 2005 he taught at Emory University's Candler School of Theology as a Post-doctoral Fellow in the Initiative in Religious Practices and Practical Theology and as Visiting Professor of World Religions and Spirituality. Since 2005 he has served as Associate Director for Buddhist Studies and Practice at Drepung Loseling Monastery, Inc., the North American branch of Drepung Loseling Monastery in India, a center for the study of Tibetan Buddhism and an academic affiliate of Emory University. He is one of the lead meditation instructors for the Cognitively-Based Compassion Training (CBCT) research at Emory. Since 2007 he has also served as a Religious Life Scholar and Advisor on Buddhism to the Dean of Religious Life at Emory. In his current studies, he is working towards a second Ph.D. in Buddhist Studies, investigating what Buddhist contemplative practices and contemporary findings in cognitive science may have to offer each other in terms of our understanding of the mind, body, and health, particularly with regard to the cultivation of compassion.

Brooke Dodson-Lavelle



Brooke is a Doctoral Candidate in the Graduate Division of Religion at Emory University. Her work focuses on the confluence of Buddhist contemplative theory and cognitive science, as well as the cultural contexts that shape the transmission, adaptation and secularization of Buddhist contemplative practices in the west. Brooke is also a lead instructor for several studies examining the efficacy of Cognitively-Based Compassion Training (CBCT), and has helped to develop and adapt CBCT for school children as well as adolescents in Atlanta's foster care system. In 2010 she helped develop the CBCT Teacher Training Program with Geshe Lobsang Negi, which she now co-leads. Brooke is also the Program Coordinator for the Emory-Tibet Partnership and co-led the Emory Tibetan Mind/Body Sciences Summer Study Abroad program in Dharamsala, India from 2009 to 2011. Prior to attending Emory, she earned her B.A. in Religion and Psychology at Barnard College and her M.A. in Religion at Columbia University.

Charles L. Raison



Charles is Associate Professor in the Department of Psychiatry and the Barry and Janet Lang Associate Professor of Integrative Mental Health at the John and Doris Norton School of Family and Consumer Sciences, University of Arizona. Prior to this, he was an Associate Professor and Clinical Director of the Mind-Body Program at Emory University. Dr. Raison received his medical degree from Washington University in St Louis, Missouri, where he was elected to Alpha Omega Alpha and won the Missouri State Medical Association Award. He completed residency training at the UCLA Neuropsychiatric Institute and Hospital in Los Angeles. The recipient of several teaching awards, Dr. Raison has received research funding from the National Institute of Mental Health, National Center for Complementary and Alternative Medicine, and the Centers for Disease Control and Prevention. His research focuses on bi-directional relationships between neuroendocrine and immune systems, especially as these pertain to depression in response to stress or medical illness. Dr. Raison has also done pioneering studies on the use of cytokine antagonists for the treatment of major depression. In addition to his activities at University of Arizona, Dr. Raison is the mental health expert for CNN.com and serves on the editorial board of *Brain, Behavior and Immunity*.

Christopher Germer



Christopher is a clinical psychologist in private practice, specializing in mindfulness, acceptance, and compassion-based psychotherapy. He is a founding member of the Institute for Meditation and Psychotherapy and has been a Clinical Instructor in Psychology at Harvard Medical School for most of the past 27 years. Dr. Germer is the author of *The Mindful Path to Self-Compassion* and co-editor of *Mindfulness and Psychotherapy* and the forthcoming *Compassion and Wisdom in Psychotherapy*. He lectures and leads workshops internationally on mindfulness and self-compassion.

Clifford Saron



Clifford is an Associate Research Scientist at the Center for Mind and Brain and M.I.N.D. Institute at the University of California at Davis. He received his Ph.D. in Neuroscience from the Albert Einstein College of Medicine in 1999 studying the electrophysiology of interhemispheric visuomotor integration. Dr. Saron has had a long-standing interest in behavioral and brain effects of meditation practice. He has been a frequent faculty member at the Mind and Life Summer Research Institute and is currently a member of the Mind and Life Institute's Program and Research Council. In the early 1990's he was centrally involved, along with Francisco Varela, Alan Wallace and Richard Davidson among others in a field research project investigating Tibetan Buddhist mind training under the auspices of the Private Office of H.H. the Dalai Lama and Mind and Life.

Currently, in collaboration with a large consortium of scientists and researchers at UC Davis and elsewhere he is Principal Investigator of the Shamatha Project, conceived with and taught by Alan Wallace.

Diego Hangartner



Diego received his Pharm.D. from the Swiss Federal Institute of Technology in Zurich, specializing in psychotherapeutic and psychoactive substances. After encountering Buddhism, he then spent 11 years in Dharamsala, India, where he learned and then studied in Tibetan Language for 7 years at the Institute of Buddhist Dialectics. During those years, he completed several long retreats, and worked as a translator and interpreter. After returning to Europe, he taught widely, worked as the General Secretary and Project Manager of His Holiness the Dalai Lama's visits to Switzerland 2005 and to Hamburg 2007. He then joined the Mind and Life Institute in the USA as the Director of Program, Research and International, and until 2012 worked as the Chief Operating Officer. Presently he is the Mind and Life Europe Director of Operations and Advancement, based in Zurich, and is a member of the Mind and Life Research Advisory Council. Diego is particularly interested in the practical aspects of cultivating compassion, mental balance, and how to actualize that - beyond the theoretical frameworks.

Erika L. Rosenberg



Erika is an emotions researcher, educator, and world-renowned expert in facial expression measurement.

She is also longtime practitioner and teacher of meditation. Erika serves on the faculty of Nyingma Institute of Tibetan Studies in Berkeley, where she teaches meditation courses and workshops for working with emotions in daily life and the development of mindfulness and compassion. She worked on the development of a secular compassion cultivation training (CCT) program with Geshe Thupten Jinpa, Ph.D. at the Center for Compassion and Altruism Research and Education (CCARE) at Stanford University, where she is a senior teacher. She has taught CCT at Google, to several community samples, and presented it to His Holiness the Dalai Lama. As a consulting scientist with the Center for Mind and Brain, at UC Davis, Erika is a senior investigator on the Shamatha Project, a controlled intervention trial on sustained meditation training. Currently, Dr. Rosenberg consults with and trains a number of academic and non-academic clients.

Eve Ekman



Eve is a San Francisco native and holds a Masters of Social Work from the University of California Berkeley. She has been a crisis counselor in the ER at the SF General Hospital since 2006. Eve is working on her Ph.D. in the School of Social Welfare and currently a Fellow with the UC Berkeley Department of Psychology Greater Good Center. For her fellowship Eve will be conducting research with correctional officers in the Department of Juvenile Probations to explore the relationship between burnout and empathy. Developing a measurement for clinical empathy among people working within interpersonally challenging environments will guide her through her Ph.D. Dissertation. Eve has been teaching the emotional skills component of the Cultivating Emotional Balance Teacher Training at Thanyapura Mind Centre in Phuket Thailand with contemplative scholar Alan Wallace, based upon a training Wallace and Eve's father Paul Ekman developed at a Mind & Life meeting in the year 2000.

Geshe Lobsang Tenzin Negi



Geshe Lobsang Tenzin Negi is the founder and director of Drepung Loseling Monastery, Inc. and a Senior Lecturer in Emory University's Department of Religion. He also serves as Director of the Emory-Tibet Partnership, a multi-dimensional initiative founded in 1998 to bring together Western scholastic tradition and Tibetan Buddhist sciences. In this capacity, he serves as Co-Director of both the Emory-Tibet Science Initiative and the Emory Collaborative for Contemplative Studies. He also developed Cognitively-Based Compassion Training (CBCT), a compassion meditation program that is currently utilized in a number of research studies, including an NIH-funded study examining the efficacy of compassion meditation on the experience of depression. Dr. Negi, a former monk, began his monastic training at The Institute of Buddhist Dialectics, the private school of His Holiness the Dalai Lama. He continued his education at Drepung Loseling Monastery in South India, where he received his Geshe Lharampa degree, the highest academic degree granted in the Tibetan Buddhist tradition, in 1994. Dr. Negi completed his Ph.D. at Emory University in 1999; his interdisciplinary dissertation centered on traditional Buddhist and contemporary Western approaches to emotions and their impact on wellness.

Jennifer S. Mascaro



Jennifer is currently a Post-Doctoral Researcher in the Laboratory for Darwinian Neuroscience at Emory. Her current work is focused on the biological bases of paternal nurturance. Her research interests are in the variation in, and plasticity of, social cognitive skills. In particular, she uses functional neuroimaging to explore how behavioral, cultural, and genetic factors modulate prosocial emotions and behaviors. Dr. Mascaro received her Ph.D. in biological anthropology in 2011 from Emory University in the laboratory of James K. Rilling, Ph.D., where her dissertation was on the longitudinal investigation of the effects of compassion meditation on the neurobiology supporting empathy and compassion.

Ph.D. Joan Halifax



Joan received her PhD in medical anthropology from Union Graduate School in 1973. Her various academic honors include receiving a National Science Foundation Fellowship in Visual Anthropology (1972), and appointment as an Honorary Research Fellow at Harvard University's Peabody Museum (1981). Her academic teaching credentials include being on the faculty of Columbia University, the University of Miami School of Medicine, the New School for Social Research. She has done anthropological field work in Africa, Central America, and in the hospital system of the United States. She also was a research fellow at the Maryland Psychiatric Research Center, founded the Ojai Foundation (1979), the Upaya Zen Center & Institute (1990), the Upaya Prison Project (1996), the Project on Being with Dying (1996). She has taught compassionate End-of-Life Care in medical schools and hospitals. Joan is a Zen Buddhist roshi, anthropologist, human rights activist, and the author of books on end-of-care and Buddhism and serves on the Board of Directors of the Mind & Life Institute.

Jocelyn Sze



Jocelyn received her Ph.D. in Clinical Science from University of California, Berkeley and a B.A. in Psychology at Stanford University. At UC Berkeley, she was awarded the Diebold Fellowship, Greater Good Science Center Hornaday Fellowship, and the Sheldon J. Korchin Dissertation Prize in Clinical Psychology. She completed a clinical internship and postdoctoral fellowship at the San Francisco VA Medical Center. She has published articles in peer-reviewed journals (e.g., *Emotion*, *Psychology and Aging*) and book chapters. She currently provides clinical services in private practice in San Francisco, specializing in evidence-based psychotherapy for mood, anxiety, behavioral health, and relational issues in adults and couples. In addition to her private practice, Dr. Sze continues to conduct research and program development work with collaborators at Stanford University, UCSF, and SFVAMC. Dr. Sze's research interests include: emotion and aging; technology-assisted psychotherapy interventions to aid in treatment dissemination; and the mechanisms through which mindfulness affects emotion regulation and wellbeing.

Joshua A. Grant



Joshua is a Post-Doctoral Fellow in the Department of Social Neuroscience at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig, working with Prof. Tania Singer. He received his Ph.D. in Neurological Sciences from the University of Montreal in 2011 under the supervision of Prof. Pierre Rainville. His doctoral work focused on the influence of Zen meditation on behavioral, neurophysiological, and experiential indices of pain perception. At the MPI, Joshua is continuing his studies about meditation and pain working with both advanced Tibetan meditators and newly trained individuals. He is also investigating the role of the endogenous opioid system in affiliation and attachment scenarios using a combination of measures from brain imaging to pharmacology and genetics.

Kristin Neff



Kristin Neff, Ph.D., received her doctorate in Human Development from the University of California at Berkeley in 1997. She is currently an Associate Professor of Human Development and Culture at the University of Texas at Austin. She is a pioneer in the field of self-compassion research, conducting the first empirical studies on self-compassion over a decade ago. In addition to writing numerous academic articles and book chapters on the topic, she is author of the book "Self-Compassion," released by William Morrow in 2011. Kristin's work has received extensive media coverage, including the New York Times, MSNBC, National Public Radio, Scientific American, and Psychology Today. In conjunction with her colleague Dr. Chris Germer, she has developed an eight-week training program called Mindful Self-Compassion, and offers workshops on self-compassion worldwide. Information on self-compassion - including videos, guided meditations, exercises, research articles, and a way to test your own self-compassion level - is available at www.self-compassion.org. Kristin is also featured in the bestselling book and award-winning documentary The Horse Boy, which chronicles her family's journey to Mongolia where they trekked on horseback to find healing for her autistic son.

Leah Weiss



Leah is a Contemplative Educator whose research focuses on the application of meditation in secular contexts. She has taught in a variety of settings including at Harvard affiliated hospitals, the Boston Center for Refugee Health and Human Rights, the Alzheimer's association, and the Department of Veterans Affairs. In 2008, Leah co-founded the Foundation for Active Compassion, a nonprofit organization which provides meditation practices of compassion and wisdom to people involved in social service and social change work. Leah is a principal CCT teacher and her work at CCARE includes curriculum development and teaching. She developed and teaches in the CCT Teacher Certification Program as well as other educational initiatives. She also has an appointment as a Lecturer in Stanford's Religious Studies Department and teaches courses in Stanford's Continuing Studies Department. Leah received her BA from Stanford University, her MA in clinical social work from Boston College, and her Ph.D. in theology and education from Boston College.

Margaret Cullen



Margaret is a Licensed Marriage and Family Therapist and a Certified Mindfulness-Based Stress Reduction Teacher. She has also trained with Zindel Segal in Mindfulness-Based Cognitive Therapy and in MB Eat with Jean Kristeller. For twenty years she has been teaching and pioneering mindfulness programs in a variety of settings including cancer support, HIV support, physician groups, executive groups, obesity, college students and Kaiser patients. For ten years she has been involved in teaching and writing curricula for several research programs at UCSF including "Cultivating Emotional Balance" designed for teachers and "Craving and Lifestyle Management with Meditation" for overweight women. In 2008 she launched a mindfulness-based emotional balance program for teachers and school administrators in Denver, Boulder, Ann Arbor and Vancouver. She has also been a facilitator of support groups for cancer patients and their loved ones for twenty years at The Cancer Support Community and is currently a senior teacher at the Center for Compassion at Stanford University, where she co-authored the Compassion Cultivation Training. Being a meditation practitioner for thirty years, she is a frequent contributor to "Inquiring Mind" and is currently writing a book on Mindfulness and Emotions.

Margaret Kemeny



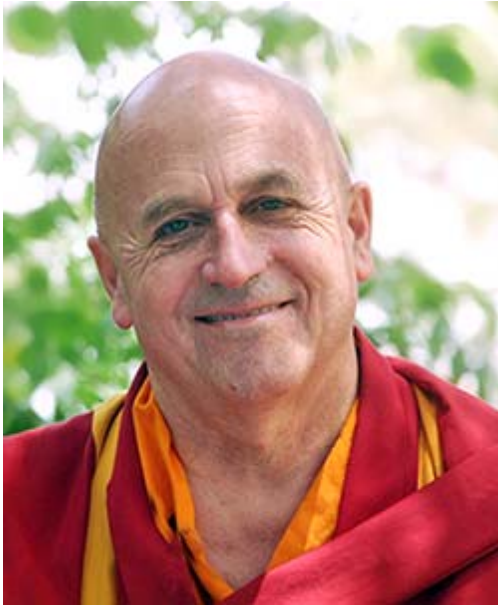
Margaret received her Ph.D. in Health Psychology from the University of California, San Francisco and also received training in clinical psychology. She completed her post-doctoral fellowship in clinical immunology at the University of California, Los Angeles (UCLA). She is an expert in the fields of health psychology and psychoneuroimmunology and has published extensively in these areas. She was a Professor of Psychology and Psychiatry at UCLA and the Director of the Norman Cousins Center in Psychoneuroimmunology. Currently, she is a Professor in the Department of Psychiatry at the University of California, San Francisco and the Director of the Health Psychology Program. Her interdisciplinary research program focuses on the effects of psychological factors on the neuroendocrine system, the immune system and health/disease. Margaret is particularly interested in how specific cognitions and emotions are linked to central and peripheral physiological systems and health and how psychological interventions could have emotional, physiological and health benefits. Margaret was the Principal Investigator of the Cultivating Emotional Balance project that evaluated effects of a meditation/emotion regulation curriculum on psychological and biological processes, including compassion. She also organized and led a scientific meeting on the definition of compassion.

Matthias Bolz



Matthias is the Laboratory Manager at the Department of Social Neuroscience of the Max Planck Institute for Human Cognitive and Brain Science in Leipzig, Germany since 2010. He received his Diploma in Psychology from Freie Universität in Berlin in 2000 and has been working at the Psychology Departments at Stanford University under the supervision of Prof. Susan C. Johnson from 2001 to 2005 and at the University of Illinois under the supervision of Prof. Renée Baillargeon from 2005 to 2009. Matthias prior research has focused on early cognitive development, Theory of Mind, and perception of agency in infants and toddlers. At the MPI, he has been involved in the logistical planning of a large scale longitudinal project on the effects of contemplative practice, the ReSource Project, as well as the development of the intervention protocol.

Matthieu Ricard



Matthieu has lived in the Himalayan region for the last forty years. Born in Aix-les-Bains, Savoie, France, he is the son of the late philosopher Jean-François Revel and the abstract painter, Yahne Le Toumelin. He earned a Ph.D. degree in Cell Genetics at the Institut Pasteur under the Nobel Laureate Francois Jacob. Since 1972, he has lived in India, Bhutan and Nepal. Dr. Ricard is a Buddhist monk and has served as French interpreter for His Holiness the Dalai Lama since 1989. He is a prolific author and photographer. Matthieu is a member of the *Mind and Life Institute*, an organization dedicated to collaborative research between scientists and Buddhist scholars and meditators on the effect of mind training and meditation on the brain. He is engaged in research on this at Madison-Wisconsin, Princeton, and Berkeley. He donates all proceeds from his books and much of his time to forty humanitarian projects (clinics, schools, orphanages, elderly people's homes, bridges, vocational training) in Nepal, India and Tibet. He received the French National Order of Merit for his humanitarian work.

Nathalie Singer



Nathalie studied Musicology, Communication and Psychology at the universities of Berlin and Paris. In 1995, she completed her Masters in Berlin in Modern Music and Sound Art. Along with her scientific work, she studied electro-acoustic composition at the GRM with Beatriz Ferreyra in Paris. Since 1995, she has worked as writer, director and producer for German and French radio stations such as Radio Berlin-Brandenburg, Bayerischer Rundfunk, Deutschlandradio Kultur, Westdeutscher Rundfunk, Radio France as a composer of radio drama, theatre and movie. In 2004, she introduced a new mini radio drama format, the WURFSENDUNG (www.dradio.de/wurfsendung), to Deutschlandradio Kultur program. The project was presented at several national and international festivals and conferences and was taken over by the BBC and Radio Denmark (VUPTI) while receiving the RADIO JOURNAL BROADCAST AWARD in 2005. Singer currently holds the position of Professor of Experimental Radio at the Bauhaus University, Weimar. Her main interest is the creation of bridges between different countries as well as the artistic and sensual communication of new ideas by the use of diverse media.

Olafur Eliasson



Olafur is a visual artist with critically acclaimed solo shows that have appeared in major museums around the world since 1997. His work, which is described by the artist as ‘experimental setups’, spans photography, installation, sculpture, and film. Established in 1995, Eliasson’s Berlin studio today numbers about fifty craftsmen, architects, geometers, and art historians. As a professor at the Berlin University of the Arts, Olafur Eliasson has run the Institut für Raumexperimente (Institute for Spatial Experiments), an innovative model for art education.

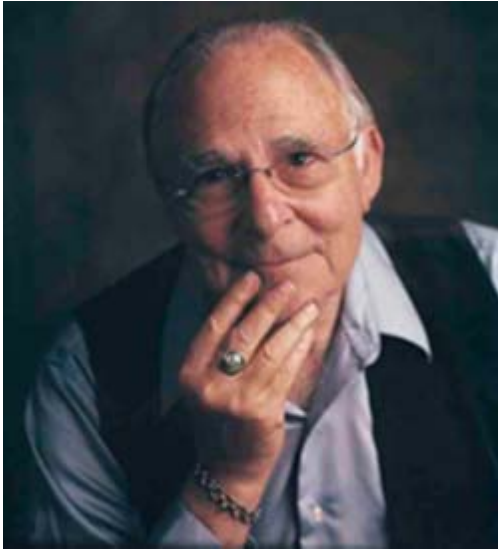
In 2003 he represented Denmark at the 50th Venice Biennale and installed The Weather Project at Tate Modern, London. The 2007 SFMOMA exhibition Take your time: Olafur Eliasson travelled until 2010. The projects Innen Stadt Aussen (Inner City Out), 2010, and Seu corpo da obra (Your body of work), 2011, involved interventions across the cities of Berlin and São Paulo. Other projects in public space include Green River, realized in various cities between 1998 and 2001; the Serpentine Gallery Pavilion 2007, London, with Kjetil Thorsen; and The New York City Waterfalls, 2008. Recent architectural works are Your Rainbow Panorama, for ARoS Aarhus Kunstmuseum, and Harpa Reykjavik Concert Hall and Conference Centre. In July 2011, Eliasson hosted the “How to train compassion” workshop, conceived and developed by Prof. Tania Singer, at his studio in Berlin.

Olga Klimecki



Olga is a neuroscientist working at the University of Geneva, Switzerland. In 2012, she completed her Ph.D. with Prof. Tania Singer at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig, Germany. She studied Psychology at the University of Mainz, Germany, for three years and then received her Master of Neuroscience at University College London in 2007. Subsequently, she started her Ph.D. thesis with Tania Singer at the University of Zurich. Olga studies how training compassion or empathy shapes affective experience, neural activation, and pro-social behavior.

Paul Ekman



Paul was an undergraduate at the University of Chicago and New York University. He received his Ph.D. in Clinical Psychology at Adelphi University (1958), after a one year internship at the Langley Porter Neuropsychiatric Institute. Currently, he is the Manager of the Paul Ekman Group, LLC (PEG), a small company that produces training devices relevant to emotional skills, and is initiating new research relevant to national security and law enforcement.

Paul Ekman's research on facial expression and body movement began in 1954, as the subject of his Master's thesis in 1955 and his first publication in 1957. In his early work, his approach to non-verbal behavior showed his training in personality. Over the next decade, a social psychological and cross-cultural emphasis characterized his work, with a growing interest in an evolutionary and semiotic frame of reference. In addition to his basic research on emotion and its expression, he has, for the last thirty years, also been studying deceit. Articles reporting on Dr. Ekman's work have appeared in Time Magazine, Smithsonian Magazine, Psychology Today, The New Yorker and others.

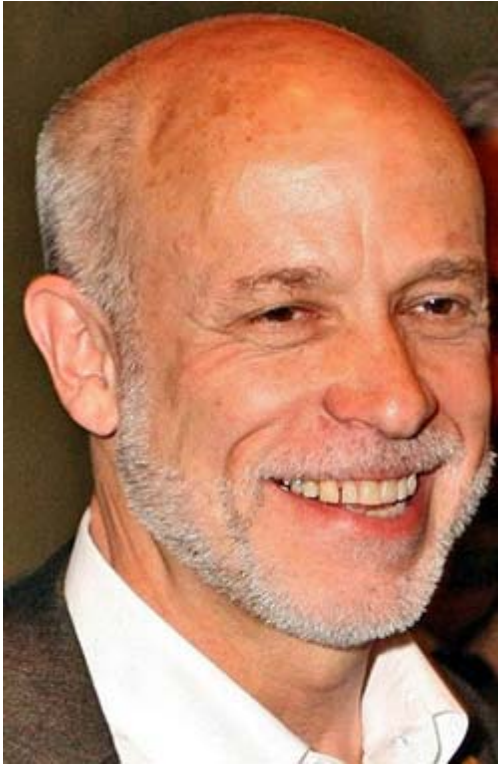
Paul Gilbert



Paul is the head of the Mental Health Research Unit as well as Professor of Clinical Psychology at the University of Derby. He has a degree in Economics (Wolverhampton, 1973), Masters in Experimental Psychology (Sussex, 1975), Ph.D. in Clinical Psychology (Edinburgh, 1980) and a diploma in Clinical Psychology awarded by the British Psychological Society (1980).

He was made a fellow of the British Psychological Society for contributions to psychological knowledge in 1993 and was president of the British Association for Cognitive and Behavioural Psychotherapy in 2003. Paul has also served on the government depression NICE guideline committee and he has published and edited 21 books, over 100 academic papers and 39 book chapters. Paul is currently a series editor for a 'Compassionate Approaches to Life Difficulties' series. After years of exploring the processes underpinning shame and its role in a variety of psychopathologies, he is now exploring the neurophysiology and therapeutic effectiveness of compassion focused therapy.

Paul Grossman



Paul is the Director of Research, Department of Psychosomatic Medicine, Division of Internal Medicine, University Hospital Basel, Switzerland. He has published on mindfulness in psychology and healthcare, and has been principal investigator of several investigations of mindfulness-based intervention for debilitating, long-lasting medical conditions (including multiple sclerosis, fibromyalgia and sequelae of bone marrow transplantation). He also studies various aspects of relations between psychology, and respiratory and cardiovascular physiology. Dr. Grossman is Associate Editor of the journal *Mindfulness*, a 'Science and Contemplative Affiliate' of the Mind and Life Institute, teaches Mindfulness and Buddhist Psychology at the Psychological Institute of the University of Freiburg, Germany, has practiced insight meditation for many years, and completed the MBSR Internship at the UMass Medical School, Center for Mindfulness in 1998.

Regula Langemann



Regula is the Co-Owner of Metapuls AG Für Unternehmenskultur und Frauenförderung (For Corporate Culture and Women's Equal Opportunity) since 1993. Since then, she has worked as a trainer and coach for communication, conflict resolution, and supervision. She also works as a Psychodrama Assistant and Lecturer for Non-violent Communication at the Institute for Humanistic Art Therapy in Zurich, at a large continuing education institute, and at Cura Viva (Institute for Management and Leadership). Furthermore, Regula worked in a community center in Zurich and had had a practice for body work for 8 years in San Francisco. She is a certified trainer for Non-violent Communication with the Center for Non-violent Communication, USA since 1998 and worked and organized seminars in collaboration.

Suna Yamaner



Suna is the Founder and Co-Owner of Metapuls AG Für Unternehmenskultur und Frauenförderung (For Corporate Culture and Women's Equal Opportunity). Since 1992, she is a trainer for communication, conflict resolution, supervision and coaching in business, administration, non-profit organizations (NGO's), schools, and universities both in Switzerland and abroad. Suna is also a lecturer for gender and transcultural communication at the University of St. Gallen, the Academy of Art and Design, Zurich, and the Lucerne School of Social Work, Switzerland. She is a certified trainer for Non-violent Communication with the Center for Non-violent Communication, USA since 1998 and worked and organized seminars in collaboration. Previously, she has worked for 15 years as the head of an international organization for Dow Jones, founding and running offices in Zurich, Paris, Vienna, and London.

Tania Singer



Tania is the Director of the Department of Social Neuroscience at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig since 2010. After receiving her Ph.D. in Psychology in 2000, she became a Post-Doctoral Fellow at the Max Planck Institute for Human Development in Berlin, at the Wellcome Department of Imaging Neuroscience, and at the Institute of Cognitive Neuroscience in London. In 2006, she accepted a position as Assistant Professor at the University of Zurich and later as Inaugural Chair of Social Neuroscience and Neuroeconomics and Co-Director of the Laboratory for Social and Neural Systems Research. In Zurich, she hosted a Mind & Life Institute Conference with His Holiness the Dalai Lama and is a Board Member of the Mind & Life Institute. Her research focuses on the foundations of social behavior and the neuronal, developmental, and hormonal mechanisms underlying social cognition and emotions (e. g, empathy, compassion, and fairness). She investigates the psychological and neuroscientific effects of compassion and meditation training. Tania has published in journals such as *Science* and *Nature*. She is the Principal Investigator of the ReSource Project, a longitudinal mental training study. She also examines how biology and psychology can inform economic decision making. Tania has addressed global concerns by presenting a proposal for Caring Economics at the World Economic Forum and the Global Economic Symposium.

Thaddeus Pace



Thaddeus studies biological mechanisms linking psychological stress to illness, and novel ways to combat stress to promote optimal health. He is Assistant Professor of Psychiatry and Behavioral Sciences in the School of Medicine at Emory, and also a member of the Neuroscience faculty in the Division of Biological and Biomedical Sciences of Emory's Laney Graduate School. Dr. Pace received his Ph.D. in Neuroscience and Psychology from the University of Colorado at Boulder for his studies on brain regulation of the cortisol response to psychological stress. His work at Emory explores endocrine and immune system changes in people who suffer from stress-related psychiatric illness, including major depression and posttraumatic stress disorder. He has also studied endocrine and inflammatory immune alterations as a result of adverse early life experiences. Informed by this work, Dr. Pace investigates the effectiveness of novel contemplative interventions to optimize psychological, inflammatory immune and endocrine responses to stress including Compassion Meditation (in collaboration with Emory's Dr. Lobsang Tenzin Negi). He is also interested in novel, natural anti-inflammatory compounds such as curcumin to promote health and wellness.

Thupten Jinpa



Thupten Jinpa has been a principal English translator to His Holiness the Dalai Lama since 1985. He is a Visiting Research Scholar at Stanford's Center for Compassion and Altruism Research and Education where he has played an instrumental role in the development of our compassion training program. He has translated and edited more than a dozen books by the Dalai Lama including the New York Times bestseller *Ethics for the New Millennium* (Riverhead, 1999), *Transforming the Mind* (Thorsons, 2000), and *Universe in a Single Atom: The Convergence of Science and Spirituality* (Morgan Road Books, 2005). Jinpa's own works include *Self, Reality and Reason in Tibetan Philosophy* and *Mind Training: The Great Collection*. Thupten Jinpa received his early education and training as a monk and received the Geshe Lharam degree from Ganden Monastic University, South India. Jinpa holds B.A. Honors in Philosophy and a Ph.D. in Religious Studies, both from Cambridge University, UK, where he also worked as a research fellow in Eastern Religion. Since 1999 Jinpa has been the president of the Institute of Tibetan Classics and editor-in-chief of the Institute's *The Library of Tibetan Classics* series. Jinpa is an adjunct professor at McGill University's Faculty of Religious Studies and is a senior contemplative advisor to the Mind and Life Institute, dedicated to fostering creative dialogue between the Buddhist tradition and modern science.

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Raising Compassion

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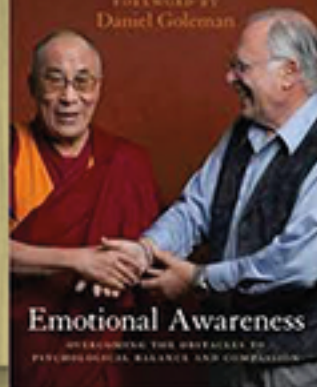
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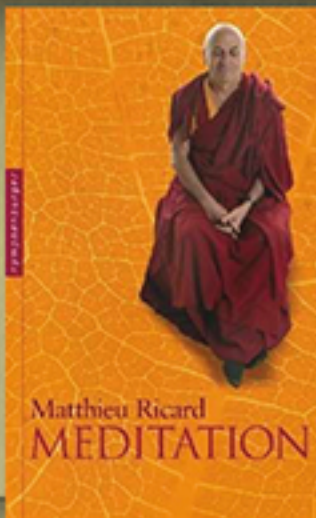
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